

VOL. II
NO. 9

THE BRICKBUILDER

SEPT.
1902

THE BRICKBUILDER.

PUBLISHED MONTHLY BY

ROGERS & MANSON,

85 Water Street, Boston, Mass. . . P. O. Box 3282.

Entered at the Boston, Mass., Post Office as Second Class Mail Matter, March 12, 1892.

COPYRIGHT, 1893, BY THE BRICKBUILDER PUBLISHING COMPANY.

Subscription price, mailed flat to subscribers in the United States and
Canada \$5.00 per year
Single numbers 50 cents
To countries in the Postal Union \$6.00 per year

SUBSCRIPTIONS PAYABLE IN ADVANCE.

For sale by all newdealers in the United States and Canada. Trade supplied by
the American News Company and its branches.

ADVERTISING.

Advertisers are classified and arranged in the following order:—

	PAGE		PAGE
Agencies.—Clay Products	II	Cements	IV
Architectural Faience	II	Clay Chemicals	IV
“ Terra-Cotta	II and III	Fire-proofing	IV
Brick	III	Machinery	IV
“ Enameled	III and IV	Roofing Tile	IV

Advertisements will be printed on cover pages only.

FIRES IN FIRE-PROOF BUILDINGS.

TEN or fifteen years ago a fire-proof building was a novelty. To-day it is an accepted fact and it is no longer a question as to what method of construction shall be adopted for a commercial building. Aside from the statutes which prescribe that buildings above a certain height shall be of fire-proof construction, business prudence calls for this and for nothing else in first-class buildings of to-day. It was long ago discovered, however, that a fire-proof building did not imply immunity from fires, and hardly a week passes that we do not see reports in the papers of a fire in a fire-proof building. Contradictory as this may sound it is perfectly logical. Scientific construction has been developed to such a certainty that we can absolutely protect the structure of any building from material damage by even an excessive conflagration, under normal conditions, but while we continue to use wood in finish and fill our offices or stores with highly combustible material, we must expect continual fires which will consume the contents. Rarely, however, does a fire in a fire-proof building extend beyond the room in which it starts, and only in such extreme hazard as is typified by the Horne Buildings in Pittsburg is there any liability of structural damage. We are therefore perfectly safe in claiming that fire-

proof construction is to-day an exact science, that the application of brick and terra-cotta has been perfected to a point which insures absolute protection, and that if fires continue in our fire-proof buildings it is in no sense because we do not know how to thoroughly protect them. It is unfortunately still cheaper in some cases to pay insurance than it is to use the precautions which we know will protect, but, given an owner who is willing to pay the bills and an architect who understands his business, there is not the slightest difficulty in so building that every chance of fire shall be eliminated.

A POSSIBLE FUNCTION OF THE ARCHITECTURAL LEAGUE.

WHEN the Architectural League of New York was founded in 1880 its membership was limited to those who were directly connected with the practice of architecture. In fact it was originally started simply as a draughtsmen's club, but it did not succeed on this basis and after a somewhat spasmodic existence of several years it was reorganized in its present shape, its membership including not only architects as such, but all those who are interested in the allied arts. The Architectural League of America is an association primarily of the architectural clubs. We believe we are right, however, in saying that with the single exception of the Architectural League of New York all of the bodies which compose the national League are strictly architectural in their character. The present president of the League is a decorator, being elected as a member of the New York League. It is a question whether the national League would not wisely follow the example set years ago of the New York League and include in its membership the societies of artists which are so numerous throughout the country and which when brought into membership with the League could be so valuable an addition to its strength and influence. We have always felt that the Architectural League of America stood for far more than a mere association of draughtsmen or young architects, and the experience of the New York society has certainly proven that coöperation between the allied arts is to be desired in every respect. And we venture as a suggestion that if the constitution of the national League is, or could be amended so as to be, sufficiently elastic to admit the art societies to its membership its field of usefulness and its essentially national character could be greatly enlarged to the benefit alike of the art societies, who, we believe, would be very glad to come into its ranks, and also greatly to the advantage of the architects from whom its ranks are now drawn.

↓ The Settlement House. III.

BY ALLEN E. POND.

HULL HOUSE, whose career as a settlement began in September, 1889, amicably disputes with the College Settlement at No. 95 Rivington Street, New York, the claim of being the first social settlement in the United States. In the year 1856 there was erected at No. 335 South Halsted Street a home for one Charles J. Hull. The builder and owner was a successful man in the yet new West, and the house was spacious for that day and excellently built. In addition to the drawing-room, li-

casings being some 12 inches wide by 8 inches deep and elaborately built up of rope and other moldings.

Then the house stood proudly alone, flanked by the almost unbroken prairie. In the fall of 1889, when Jane Addams and Ellen Gates Starr quietly established their home in the second story of the house, dingy, forlorn and prematurely old, the first story was used as the office of a furniture factory—a wooden shell that crowded up against the rear of the mansion; and the second story, drenched by the rains that poured through innumerable holes in the neglected tin roof, had long been the home of shifting and shiftless tenants. The meadows and prai-



DETAIL OF COURT ON HALSTED STREET, HULL HOUSE.

brary, dining-room and the other usual apartments of a northern house of the period, there was an octagonal office in a one-story wing to the south, opening from the library and on to the veranda. The material was a purplish-red brick, in texture and color not unlike the common brick of Sayre & Fisher. On three sides of the house were broad verandas; a low-gabled roof covered the high attic surmounting the second story, and the wide eaves were carried by heavily molded brackets. Indeed, after the mode of the time, columns, lintels, casings and cornices were all heavily molded; the interior door and window

rie had been swallowed up in a wilderness of brick and lumber; close against the house on the north stood a shabby frame shed which housed an undertaking establishment; on the south were toppling and decayed frame buildings used by dealers in coal, hay and feed and second-hand bottles, with upper floors given over to tenements. The unhappy mansion, setting a little back from the highway, still preserved a conspicuous individuality; and though its builder had long been dead and the heirs of his estate had fled to a more congenial neighborhood, the old house was still known to the neighborhood as



HALSTED AND POLK STREET FRONTS.



EWING AND HALSTED STREET FRONTS.
HULL HOUSE, CHICAGO. Pond & Pond, Architects.



AUDITORIUM.



RESIDENTS' DINING-ROOM.



GYMNASIUM.



THE COFFEE HOUSE.



LABOR MUSEUM.



SHOPS.

INTERIORS, HULL HOUSE.

been subjected to much remodeling. The old dining-room has become the residents' library; where the old kitchen, laundry and back staircase were is now the residents' dining-room, some 31 feet long and served via a small pantry from the coffee-house kitchen; the partition between the old drawing-room and the somewhat narrow front stair hall has been almost wholly cut away so that the old drawing-room now forms merely part of a large reception hall, the front end of which is a thoroughfare to the Auditorium and Children's House. The old house in its present form affords: on its first floor, reception hall, parlor, library, office, residents' dining-room; and on its second and third floors, fourteen bedrooms and four bath rooms, besides a trunk room and linen and housemaids' closets.

In 1895 the Children's House was built at the northeast corner of the block, in contact with Hull House only at its southwest corner and without direct access from Hull House. Here, on the first floor are two boys' clubrooms; on the second floor the crèche with its two bedrooms, dining-room, kitchen, toilet room and "sunshine porch" guarded by wire netting; on the third floor the kindergarten with its toilet rooms and balcony; on the fourth, three rooms used for children's music classes. The following year a third story was put on the "Butler Gallery" for men in residence; and now, as remodeled, there are provided on the second and third floors of the Butler Building eight rooms for men with requisite bath and toilet rooms.

One of the earliest enterprises fostered by Hull House was the founding of the working girls' cooperative home which was organized and incorporated under the name of the "Jane Club." This club, whose purpose was to show that working girls could have a home of their own conducted at scarcely greater expense than the poorest boarding house entailed, was launched in six flats opening on a common staircase in a three-story building on Ewing Street not far from Hull House. In 1898, the Jane Club, having demonstrated its ability to sustain itself in quarters ill suited to its needs, was provided with a building specially designed for its uses and erected on land bought for the purpose under the auspices of friends of Hull House. The Jane Club building faces Ewing Street, just across the alley west of Hull House, and is separated from the Gymnasium building by a public alley parallel with Ewing Street and running west from the alley back of Hull House. In the basement and three stories are: laundry, trunk room, kitchen, serving-room, dining-room, drawing-room, library and bedrooms for thirty girls, — twenty single and four double rooms, — with ample bath and toilet facilities.

In 1895 Hull House secured a twenty-five years' lease of the premises having a frontage of 118 feet on Halsted Street and extending westward some 162 feet on Polk Street. It seemed warrantable to build more substantially thereafter than on the short leases ruling hitherto. There was urgent need of an auditorium to relieve the constant demand on the gymnasium room to do double duty; the coffee house no longer met the needs of the patrons; and in 1899 a fire-proof building was erected north of Hull House and west of the Children's House and in contact with each. The main entrance is from Polk Street, but by a vestibule in its southeast corner an

exit and secondary entrance were provided for the Auditorium building through the Children's House vestibule, and an opening at this point to the old drawing-room afforded the first under-roof connection between Hull House and the Children's House. The Auditorium, with a view to its frequent use for amateur theatricals, was equipped with a stage having movable scenery and contiguous dressing-rooms. In the gallery, at the end opposite the stage, space is arranged for future installation of a pipe organ. The walls of both coffee room and Auditorium are faced on interior with a dull-red pressed brick; the ceiling of the coffee room is formed by the actual tile arches that support the second floor, and these tiles, washed and treated to a single coat of boiled oil, ranging in color from a light whitish buff to a deep sienna, make a very effective and architectural ceiling, demonstrating the possibilities of the material now universally hidden by plaster.

In the fall of 1900 Hull House acquired a fifty years' lease of the ground already under lease until 1920 and of the remainder of the block bounded by Halsted, Polk and Ewing and the first alley to the west of Halsted and of forty feet on Polk west of this alley. The terms of the lease required the opening of this west alley and necessitated the moving of the Gymnasium to which reference has already been made. In the fall of 1901 Hull House began the erection of a building on the south end of the block for the purpose of providing through rentals an income to be applied toward the maintenance of the House. On the first floor at the north end of the Halsted Street wing are three rooms (conversation, billiard and reading), with coat room, shower and toilet rooms for use of the neighborhood "Men's Club," which had had quarters in the first Gymnasium building. The remainder of the building is given to flats for housekeeping and to bachelors' apartments. These latter open through a fire door to the second story of the Butler Building and are intended to supplement the space given to men residents, though their use is not restricted to actual residents of Hull House. The outcome of the occupancy of these flats, completed this spring, will have a certain social interest, as the tenants literally come from all ranks of society above the very poorest, and the settlement theory of "social unification" will be put to an extreme practical test.

The Jane Club and the Hull House Association apartment building are, literally speaking, no part of Hull House, the "social settlement," though they are part of the Hull House group of buildings and owe their existence to the creative inspiration of Hull House. This year it is expected that there will be added to the group yet another building which will sustain to Hull House much such relation as does the Jane Club. Plans are now under way for the Crane Tenement, to be erected next west of the Jane Club on a piece of land having a south frontage of 100 feet on Ewing, a depth of 104 feet to the alley and bounded on the west by another alley. This building, in quadrangular form, will have basement and four stories on the north and basement and three stories on the south, east and west. It will contain on the first floor front a playroom for older children, on the second floor front a crèche, on the third floor front a kindergarten. The crèche will be more than double the size of the Hull House crèche, and the kindergarten some twenty per cent

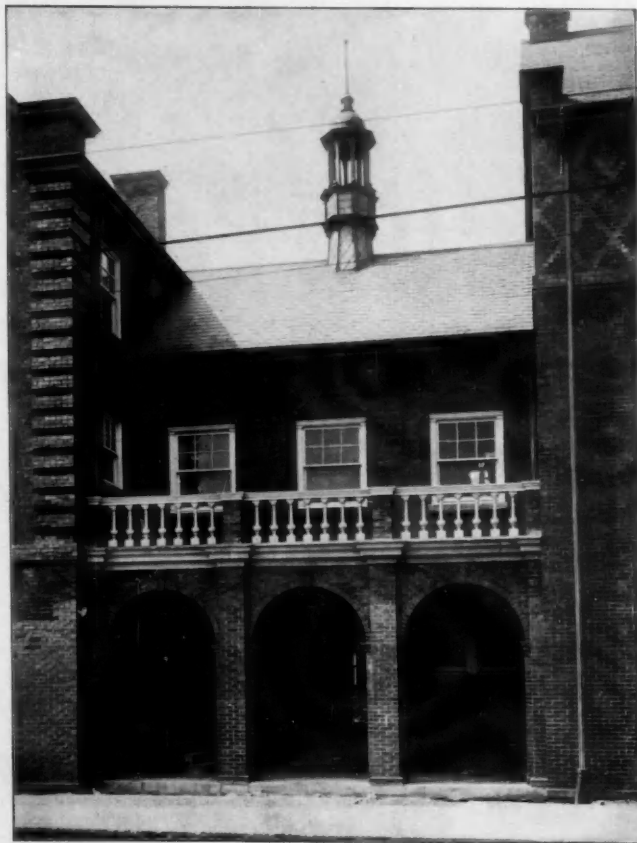
larger; and on the completion of this new building the crèche and kindergarten in the Children's House will be discontinued and the space devoted to children's clubs and classes. In addition to these special features the Crane Tenement will contain twenty-six flats (three of them capable at need of subdivision into six) which it is proposed to rent to the poorest families that can pay rent at all. In the tenement, as in the Hull House apartment building, there are no light wells, and each stair hall, living room, bedroom and bath room opens directly on to the outer air; the central court in the tenement will be 50 x 55 feet. The entire group thus has a frontage of one block (226 feet 4 inches) on Halsted Street, of 122 feet 9 inches on Polk and Ewing back to the first alley, of 126 feet 6 inches additional on Ewing from the first to the second alley, and of 40 feet additional on Polk west of the first alley.

This rapid survey of the origins and history of the several buildings that comprise the Hull House group will have made it clear that the plant as a whole cannot lay claim to being a closely knit, highly developed organism. And this, I take it, is one of the reasonable tests of a building—that when it must necessarily be made up of parts having special functions but still inter-related and severally interdependent, this interrelation, as in a closely knit organism, shall be achieved in a most direct and natural way, so that the functioning of the parts and of the whole shall be in a logical process and without waste. Judged by this test a building must be held to be successful in proportion as its uses flow easily and without cross currents through their destined channels, so that it shall seem to the close observer that the ends sought were clearly foreseen and that the means of meeting them were evolved as a whole and not patched together on straggling afterthoughts. In short, when we study a building from the standpoint of plan considered as the crystallization of uses, its logic must convince us by its directness, its simplicity, its clarity. If this standard is severe it is nevertheless a wholesome thing for architecture. And if when applying it we recall our own experience with instances of problems whose inherent difficulties were aided and abetted by the idiosyncrasies of owners or committees, it should be possible for us to judge a building rigorously and yet without expressing condemnation

of the architect, whose warrantable plea of confession and avoidance may not have reached our ear. Judged by this test Hull House is plainly rather an aggregation of partially related units than a logical organism. It is, however, only fair that this rigor of judgment shall be somewhat abated for a building or group of buildings that has grown by a long series of wholly unforeseeable accretions to an original accidental unit.

Architecture is, moreover, many-sided and appeals not only to dispassionate reason, but to sentiments that can with difficulty be rationalized. Continually in the Old World we chance upon some building that cannot stand a critical analysis from the view point of clarity of plan, that bears the marks of changes and additions wrought

by successive generations of users, but whose heterogeneous whole has an indisputable homogeneity that defies logic and triumphs over cross currents and contradictions; each set of occupants, intent on their own immediate need or whim, has changed the uses of parts, has added other parts, working with diverse materials and in divergent styles; and through it all the building has somehow preserved a certain unity and individuality of its own. We are accustomed to finding this sort of subtle process taking place in buildings evolved during a considerable period of time. As a matter of fact Hull House in the period of twelve years has gone through just such an evolution as these Old World buildings have in as many generations. Neither the faith nor the fantasy of its founders anticipated so diverse and so great a growth. Therefore the successive steps in build-



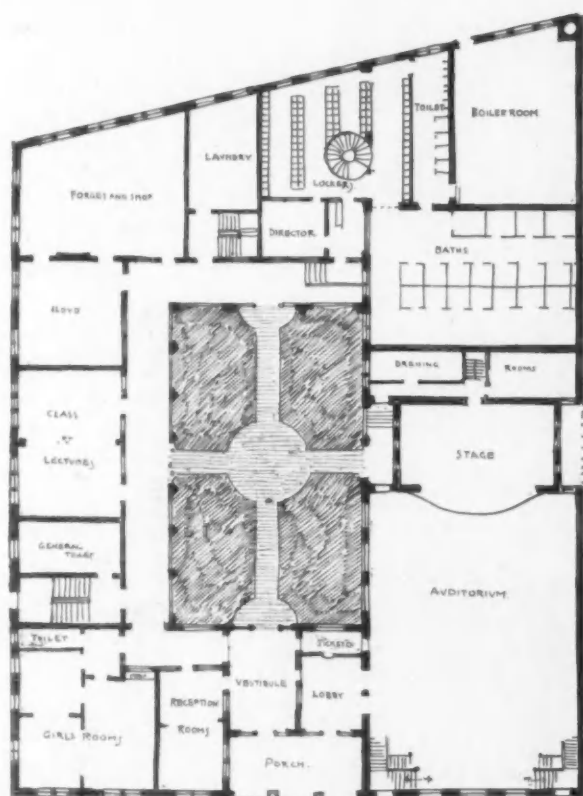
DETAIL ON HALSTED STREET, HULL HOUSE.

ing did not logically look forward to or prepare the way for those that followed. But there is a certain homogeneity, almost an individuality, to the group; and it is said to have something of charm to the public and of interest to the architect by reason of the handling of materials. Although Hull House, in the range of its activities, covers a far wider field than inheres in the settlement idea as first conceived, the spirit and methods of Hull House are distinctively those of the social settlement; and, when adding to its buildings, it has measurably succeeded in avoiding an institutional and formal aspect.

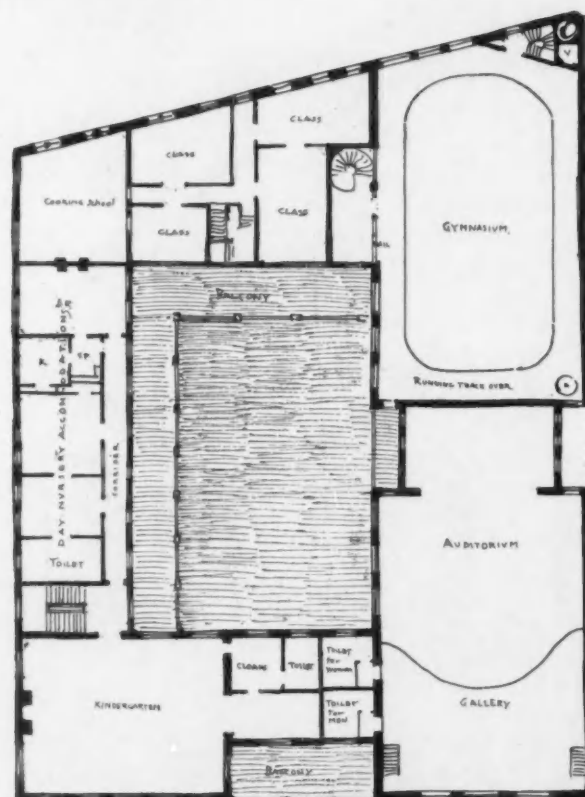
The comment naturally suggests itself that, in the case of each of the three settlements whose plans have been considered in detail, there were peculiar local condi-

tions that affected the result. Each was a solution in a way of its own problem; but does any of them approach closely to a satisfactory ideal solution of the general problem of social settlement planning? Hull House, starting in an old mansion, lacking prescience of its future and limited at first by short land tenure and cramped ground area, was without organic systematization in its growth. The Commons problem is complicated by the injection of the necessity of providing for the requirements of the church society on an already insufficient ground area. Even at the Northwestern, although the problem is simplified from the fact that the work holds quite closely to the usual settlement type, the ground area was too small and the available funds for building quite inadequate. Suppose that there is pre-

whose members sought by distance and thick walls wholly to detach themselves from the world. There is another sort of monastic establishment, great missionary settlements whose members, in addition to their religious functions, were students, teachers and craftsmen. The members of these communities did for the Europe that was being evolved out of the chaos of war and barbarism that followed the "wandering of the nations" an inestimable service—preaching the sacredness of human life, teaching letters and fostering literature and ideas, and, not least, teaching by example the dignity of labor. Great Britain was dotted with these missionary settlements, bulwarks against barbarism, forerunners of civilization. They also believed and taught the efficacy of creeds and formulæ; and to them the thought of a



FIRST FLOOR PLAN



SECOND FLOOR PLAN

FLOOR PLANS, STUDY FOR DAVID SWING SETTLEMENT.

sented the problem of planning and designing a building for a settlement, and that, within reasonable limits and short of extravagance, land and money are available, is there any sort of scheme that seems peculiarly fit? Before attempting to answer this query, it may be interesting to make the further inquiry whether the social settlement, admittedly unique among modern philanthropic enterprises, is wholly without parallel in the past.

A backward glance will at once suggest, it seems to me, a striking analogy between the social settlement and the distinctively missionary monastic foundations of the Christian church. I say "missionary" monasteries, because the settlement plainly bears no resemblance whatever to those anchorite or ascetic monastic communities

future life was an omnipresent and all-potent factor in the present life.

A change has come over the spirit of the western world; less and less weight is given to creeds; and it is tacitly admitted that our business in this world is with this life in its larger meaning, and that when we get to another world it will be time enough to deal with questions of a future life. We find that at the very core of our civilization, in the great cities that are the nerve centers of the commercial and industrial life that we boast, masses of men and women and children are in a condition of mental and moral and physical deprivation compared with which the militant barbarism of the pre-feudal and feudal ages seems almost benign. The social settle-

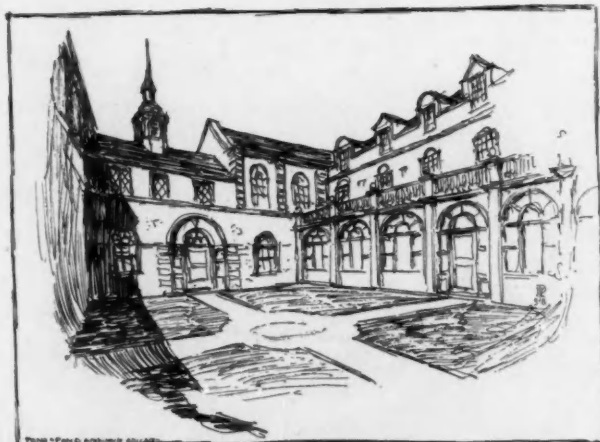
ment in our unevangelical, scientific, industrial age is the legitimate sociological successor of the evangelizing and teaching and working monastic establishment of the earlier and middle Christian centuries. The monastic quadrangle, with its combination of refectories, assembly rooms, libraries, shops and individual bedrooms, is the analogue of the settlement building to-day. Long before the thought of this analogy had been suggested to me, when as yet no Chicago settlement had essayed a building built for its own uses, our firm was called upon to make tentative sketches for two settlements, and in both instances, without knowledge of existing models, had settled down on the quadrangular form. Neither project was carried out. The earliest was for a settlement soon thereafter inaugurated in a shabby old dwelling; but when, some years later, it made a beginning of



STREET FRONT.

conceived it to be a part of the settlement idea that those who founded a settlement should transplant in their new location the exact mode of life that they had been leading and should share this as well as themselves with their neighbors. They were university men; and, in consonance with this theory, Toynbee Hall was patterned on the quadrangular scheme of an English college. Whether,

had the Toynbee men not been English university men, they would still have hit on the quadrangular type, is a wholly speculative question. They would indeed have lacked the particular reason that did decide them to use it; but as Englishmen they were familiar with monastic and college quadrangles, and the peculiar appropriateness of the scheme would be quite as likely to have occurred to them as it did to us who, knowing nothing at that time of the plan of Toynbee Hall and never having lived in a



VIEW IN QUADRANGLE.



VIEW IN QUADRANGLE.

STUDY FOR DAVID SWING SETTLEMENT.

building for itself, the work fell into other hands. The other — the proposed David Swing memorial settlement — was abandoned entirely. The rough studies for this latter scheme are reproduced with these articles. I incline strongly to the opinion that the quadrangular type is peculiarly adapted, — perhaps, given space and money, best adapted to express the settlement spirit in a plan wherein the differentiation of functions can be achieved without loss of organic coherence. In the quadrangle, livableness and homelikeness are readily made to coexist with the sheltering of the necessary formal functions. It is curious to note in this connection that Toynbee Hall — the first settlement to be founded and perhaps the only one that made its original debut in quarters built expressly for it — is a quadrangle, although for quite other reasons than the ones that led our firm to hit on the quadrangular type. In the case of Toynbee Hall the founders

college quadrangle, still came by a logical process to the same result.

(CONCLUDED.)

THERE have been many attempts to discover and put upon the market a substitute for our ordinary white glazed or enamelled wall tiles, but so far with very little success. Glass, cork, enamelled zinc plates, stamped steel, and paper specially treated have all made their appearance, but there is nothing yet put forth that on the whole answers successfully so many conditions as the common glazed terra-cotta or tile which has been in use for so many centuries. No material can be expected to meet absolutely all conditions, and nothing is perfect, but a glazed tile surface certainly comes nearer to perfection than anything with which we are at present familiar.

Recent Interesting Brickwork in Buffalo.

APARTMENT BUILDINGS AND CLUBHOUSES.

BY ULYSSES G. ORR.

APARTMENT houses in Buffalo are like churches in Brooklyn, to be found on nearly every corner and in the middle of the block as well. There are, of course, good, bad and indifferent, the bad largely predominating, as they no doubt do in all cities. Until recently Buffalo was a city without apartment buildings, but some one thought the town metropolitan enough to support an apartment house, when, lo and behold! the multitude rose and did likewise, some with better results than others, however.

The Algonquin, designed by F. H. Loverin, shows a pleasing effect in rough brick, a dark wash brick in basement story and a lighter brick of good texture above.

Some very pleasing brickwork of good texture and satisfactory color combination is shown in the interiors of the annex to the Markeen, from designs by Esenwein & Johnson. The interior brickwork is fully as pleasing as that outside, and is as interesting as it is original.

A simple little building planned by George W. Graves is the Windsor. It will be noticed that the corners of this building seem amply strong, and thereby hangs a tale. When this building was being built, the famous Fargo mansion was razed and the owner saw on the bargain counter, at a price which simply could not be resisted, a number of beautifully cut quoins. An older architect would not have permitted them to be used.



THE MELTON MANOR.
W. L. Schmoller, Architect.

One of the earlier buildings, the Lenox, planned by Loverin & Whelan, developed happily. Built on one of the finest residence streets, North Street, near Delaware Avenue, it naturally disturbed the peace of mind of nearby residents. But they took the matter philosophically and now have little to complain of.

The Colonial, by James A. Johnson, is one of our Delaware Avenue apartments, and is an interesting example of the style after which it is named. A dark brown wash brick with dark joints in first story and red brick with white joints above, together with the white marble trimmings, make a pleasing combination.

A charming little building on Delaware Avenue is the Morey, designed by H. Osgood Holland, who endeavored to disfigure the street as little as possible by giving his design the appearance of a residence as nearly as might be.

The Touraine, Buffalo's newest apartment building, is a simple but pleasing design by Esenwein & Johnson. Unfortunately for photographing buildings in summer, Buffalo has an overabundance of trees, but the view from Johnson Park shows what the view from Delaware Avenue does not.

A homelike little building in buff brick is the St. Croix from plans by John S. Rowe. The wall surfaces in this building are broken up very satisfactorily.

The Irving, a small building behind the trees, is from plans by H. G. Larzelere, and is built of light buff brick, white joints and buff terra-cotta trim.

Some very satisfactory brickwork is shown in the La Salle, planned by F. H. Loverin, a light buff brick with lighter trimmings making a combination of excellent color value.



THE ALGONQUIN.
F. H. Loverin, Architect.

Another example, from the plans of John S. Rowe, is the Roanoke, in which two shades of buff brick were used with pleasing results.



THE MOREY.
H. Osgood Holland, Architect.

The Melton Manor, from plans by W. L. Schmolle, occupies an entire block and presents a very pleasing front. Built with a buff brick, light joint and buff trim,



THE LA SALLE.
F. H. Loverin, Architect.

The Hudson, a pompous little building by F. H. Loverin, has some clever brickwork.



THE TINDLE.
Metzger & Greenfield, Architects.

depending upon the lights and shadows from the various projections and recesses for its variety of tone.



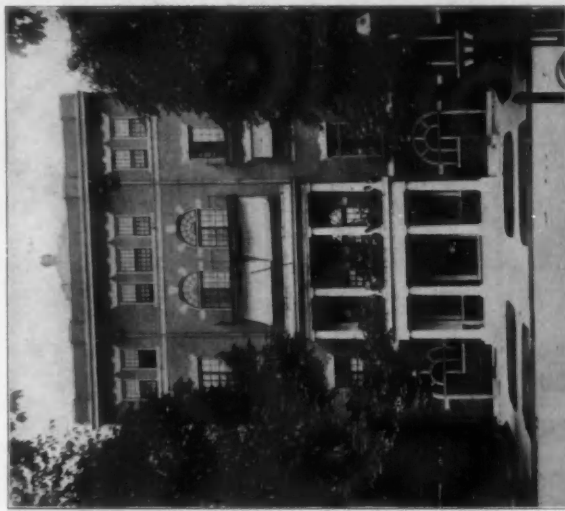
THE HUDSON.
F. H. Loverin, Architect.



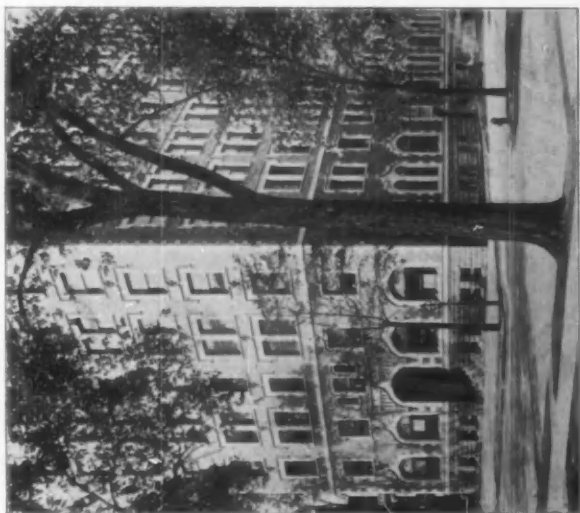
THE WINDSOR.
George W. Graves, Architect.



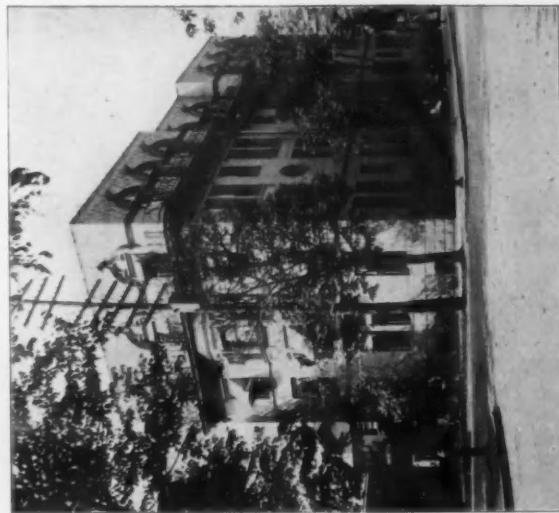
THE LENOX.
Loverin & Whelan, Architects.



THE COLONIAL.
Broughton & Johnson, Architects.



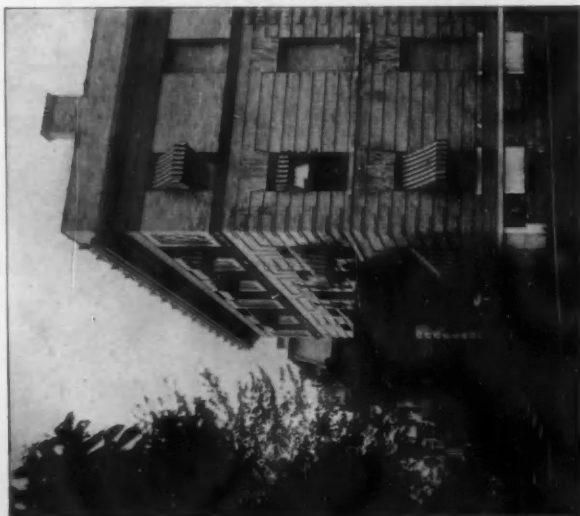
THE TOURAINE.
Esenwein & Johnson, Architects.



THE ROANOKE.
John S. Rowe, Architect.
APARTMENTS, BUFFALO, N. Y.



THE TOURAINE.
Esenwein & Johnson, Architects.



THE ST. CROIX.
John S. Rowe, Architect.



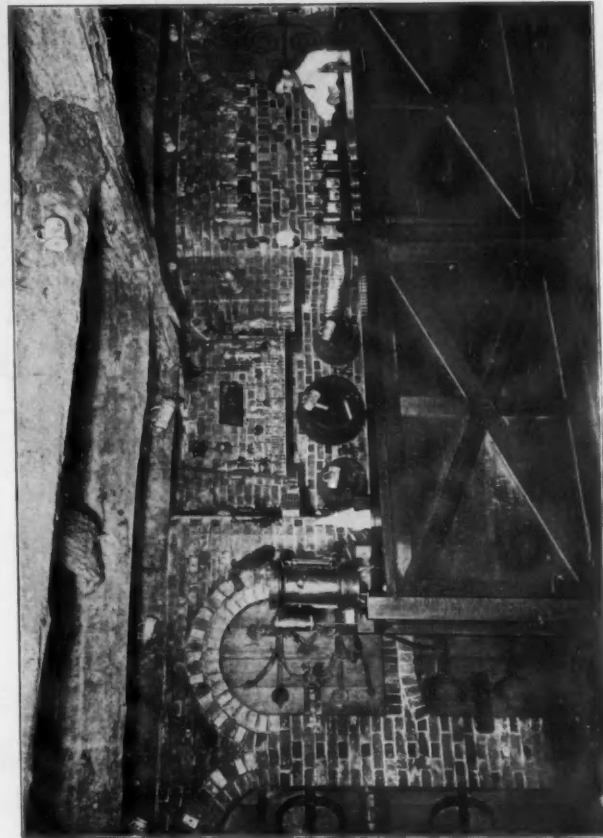
MANTEL IN DINING-ROOM.



FIREPLACE IN RATHSKELLER.



MUSIC GALLERY, DINING-ROOM.



BAR IN RATHSKELLER.

INTERIOR VIEWS, THE MARKEEN APARTMENT, BUFFALO, N. Y.

Esenwein & Johnson, Architects.

An example of pattern brickwork is the Tindle, by Metzger & Greenfield. Golden-brown shades were used with good effect except where plain wall was desired. The mixing of shades was left to the bricklayers, in this case with fatal effect.

Of the clubhouses in Buffalo, all the better class are built of brick.

The Saturn Club, designed by Marling & Burdett, is an excellent demonstration of the fact that the manner in which a brick is used has more to do with the successful appearance of a



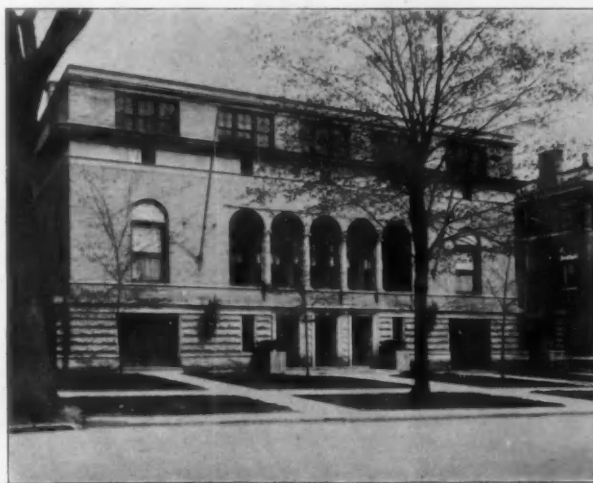
OTTOWEGA CLUB.
Green & Wicks, Architects.

A simple and dignified building is the Twentieth Century Club, from designs by Green & Wicks. A pink brick with some variety of shade, neutral joints and light buff stone and terracotta trimmings make a pleasing color combination.

The Gymnasium and Natatorium of the Buffalo Club, designed by Green & Wicks, is a satisfactory job of brickwork. A red brick with variation enough to avoid monotony, laid up in white mortar, and the second story filled in with stucco, makes a very pleasing combination.



BUFFALO CLUB, GYMNASIUM AND NATATORIUM.
Green & Wicks, Architects.



TWENTIETH CENTURY CLUB.
Green & Wicks, Architects.



SATURN CLUB.
Marling & Burdett, Architects.



MAIN ENTRANCE, SATURN CLUB.

building than the quality of the brick. Common brick were used in this building with admirable effect. The detail of main entrance shows this clearly.

The Ottowega Club, a splendidly designed building, with just brick enough to admit of its associating with brick buildings, is from the plans of Green & Wicks.

BY D. EVERETT WAID.

It is well to have the client's attorney in consultation in letting contracts, particularly if any provisions are to be made outside the usual. Insurance against accident and the elements should be provided, the contractor being made responsible for the former and the owner for the latter. Dates should be stated in the contract for the completion of various stages of the work, for its moral effect as well as to give a basis on which to forfeit a contract if proper progress is not made. Very frequently

BLDG NO.

A. J. MANNING, Architect,
142 Fifth Avenue, New York.

Weather conditions _____

How much time lost owing to bad weather _____

Number of men at work _____ What doing _____

Work done since last report _____

Materials delivered since last report _____

Materials wanted on the work now _____

Materials not on the ground that will be required two weeks hence _____

Mechanics wanted on the work _____

Mechanics that will be needed two weeks from this inspection _____

If work is delayed or will be delayed for want of materials, details, or for any other reason, state for what, and include any remarks not covered by above inquiries _____

Superintendent, Clerk-of-Works, or Foreman.
(ORIGINAL SIZE, 13 X 8 INCHES.)

FIG. 1. A FORM FOR SUPERINTENDENT'S REPORTS

Handwritten: House for -
MRS. Geo. E. Post, Jr., No. 20.
New York 27th Nov. 1901. 19

I submit the following report of the progress of the work at the building, from 22d Nov. 1901 to date.

EXCAVATION Excavating for foundation of the house has been commenced and has advanced to a depth of about two feet.

MASON WORK: No work at present on outside walls. Mason cutting away brick pier in cellar on side of Kitchen chimney to allow space for dumb-waiter to be run down to cellar. Concrete flooring has been set in cellar in the place where the furnaces are to be set. Mason should be notified to protect the terra cotta pieces at ~~southwest corner~~ southwest corner of third floor beams have been set in southwest corner over Mr. Post's room. Most of work about as per last report.

Carpenter is waiting for stirrup irons for hanging third floor beams and for mason work to advance in main part of house. First floor beams in kitchen have been shored up temporarily where girder is to be moved to allow dumb-waiter to be run down to cellar.

HEATING The three Richardson & Boynton furnaces which have been ordered delivered at building, two of which have been set up in place.

Handwritten notes on left margin:
S. M. Dwyer?
I will write you
the way, see plans of
propose the 1st
also

Handwritten signature: T. H. Drake

Handwritten at bottom: GEO. E. POST, Eng. Architect.

FIG. 2. A TYPICAL REPORT BY AN ARCHITECT'S SUPERINTENDENT.

Delays may be avoided and the contractor encouraged to order materials well in advance by making payments on materials delivered and before erection, but care should be taken that all such materials are definitely listed in the contractor's application for certificate, otherwise there may be difficulty in establishing ownership and preventing removal of materials by subcontractors in the event, for instance, of the failure of the contractor. Legal advice should be had on such points.

In order to bind a contractor to fulfill his agreement the following provision



FIG. 3. SAMPLE OF INSTRUCTIONS TO ARCHITECT'S SUPERINTENDENT REGARDING DEFECTIVE WORK.

the supervision of construction is attended to by superintendents who do nothing else. It is not safe to leave this duty to the man who made the drawings for a given building, as he may be unfit by temperament or experience to superintend. On the other hand, it is a policy mutually beneficial to allow to the draughtsman a share of the oversight of the execution of work. He should try to get the mechanic's point of view at every opportunity. An occasional visit to the works, too, by the one who made the drawings will reveal errors or deviations which escaped the eye of even the skilled but busy regular superintendent, who may have a lot of buildings in hand at once. Some of the most successful offices have not only regular superintendents, but others, McKim,

is frequently written into the contract: "The contractor agrees to give a bond acceptable to the owner binding himself in the sum of (usually a third of the contract price) to fulfill the terms of this contract and complete the (—) work free of all liens."

EXECUTION OF WORK.—In large offices

Mead & White, for instance, allow joint oversight by the regular outside man and the draughtsman who had charge of the drawings of the particular piece of work.

R. H. Robertson has the execution of his work looked after by regular superintendents, who keep in touch of course with the office. He has found that it is demoralizing for draughtsmen to attempt to do both office work and outside superintending.

SUPERINTENDENTS' REPORTS.—Superintendents' reports may be kept in a manner exactly similar to the "Memo Record" (previously described) rough pencil note records of progress of a

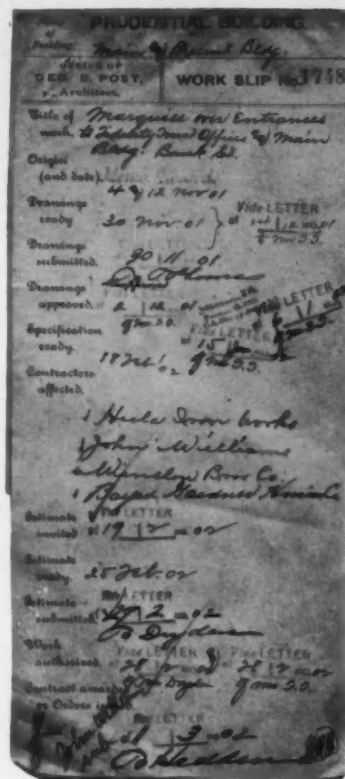


FIG. 4. WORK SLIP.

WORK SLIP	
BLDG. NO. 518	
TITLE OF WORK Mason Work-Magestic Theatre	
ORIGIN AND DATE	
DATE TO COMPLETE	
DRAWINGS READY	SUBMITTED
DRAWINGS APPROVED	SPEC. READY
CONTRACTORS AFFEKED (over)	
[LIST ON BACK]	
ESTIMATE INVITED 4/12 '01	ESTIMATE READY 4/27 '01
ESTIMATE SUBMITTED 4/28	WORK AUTHORIZED 5/3 '01
CONTRACT OR ORDER GIVEN	

(ORIGINAL SIZE, 5 X 3 INCHES.)

FIG. 5. WORK SLIP. LIST OF CONTRACTORS INVITED TO BID MAY BE WRITTEN ON BACK OF CARD.

building or more elaborate and formal reports, as one prefers. In one large New York office these reports are watched very carefully. An "N. C." is stamped opposite every paragraph which records any work *Not according to Contract*, and those "N. C.'s" are never lost sight of until subsequent reports show that defective work was made good and how.

The writer uses a rubber-stamp heading on the afore-said yellow-pad paper for superintendents' reports. Some

CERTIFICATE NO. 27	DATE July 1	BUILDING NO. 2
TO John Smith Esq.		
ADDRESS 24 Fulton St. N. Y.		
THIS CERTIFIES THAT Michael Ryan		
IS ENTITLED TO A PAYMENT OF Two hundred fifty		
DOLLARS IN FULL OF CONTRACT FOR Mason work		
of residence at Spring Lake N. Y.		
UNDER TERMS OF CONTRACT DATED May 1 1901		
Thornton Mason		
250.00		
RECEIVED PAYMENT		

(ORIGINAL SIZE, 8 X 3 3/4 INCHES.)

FIG. 6. A CERTIFICATE.

STATEMENT.	
CONTRACT AMOUNT	1150
EXTRAS	75
TOTAL	1225
DEDUCTIONS	25
NET TOTAL	1200
FORMER CERTIFICATES	950
THIS CERTIFICATE	250
TOTAL TO DATE	1200

(ORIGINAL SIZE, 8 X 3 3/4 INCHES.)

FIG. 7. REVERSE SIDE OF CERTIFICATE SHOWN IN FIG. 6. THE FIRST FIVE LINES OF THE STATEMENT ARE USUALLY LEFT BLANK EXCEPT IN THE FINAL CERTIFICATE.

EXPENSE RECORD <i>R. R. Spencer, Cottage</i> BUILDING NO. <i>17</i>					
DATE	1901	DATE	1901	DATE	1901
Mar 1	615				615
" 8	3470				3470
" 15	6945				7495
" 22	210				210
" 29	1340				2340
Apr 5	2235				2315
" 12	2030				23
" 19	719				1088
" 26					2222
May 3	205				615
" 10	4712				6450
" 17	266				266
TOTAL	23497	5314	575		29386

(ORIGINAL SIZE, 5 X 3 INCHES.)

FIG. 8. EXPENSE RECORD CARD. BOTH SIDES RULED ALIKE.

architects have quite elaborate printed forms. An excellent simple printed form which serves at once as instruction to an unskilled superintendent and a reminder to an experienced man is that used by A. J. Manning. (See Fig. 1.)

The writer would insert two lines in this form as follows:

"Work not according to contract"

"Defective work formerly reported made good and how"

Many of the most successful architects attend personally to the supervision of contractors' work. But by whomsoever done it is most important to keep a written account of every visit or inspection of work in progress, — a "diary" some call it, — let us say "superintendence record."

WORK SLIPS. — "Work slips" are a convenient device in a large office, or in a small office where one person has many duties to carry. If an owner decides during the erection of his building that he would like a marquis over an entrance he writes his architect, or perhaps calls and informs him verbally, as was doubtless the case in the instance illustrated (Fig. 4). This is a slip photographed in Mr. Post's office. From the office record of the client's call as evidenced by the "Origin, Memo Record 4 and 12 Nov. 01" (there were two calls, it seems), the slip was started and became at once a means of following up the piece of work and a history of what was done. As each step in the office was accomplished, "Drawings made," "Drawings submitted," "Drawings approved," etc., the fact was noted, and when finally "Contract awarded" was reached the active usefulness of that particular slip was ended and it was filed away. In a large office one clerk may give a large part of his time to a stack of these work slips. In a moderate-sized office the writer has found the same idea useful (see Fig. 5, which is a form printed on 3 x 5 cards). I have a small tray of these cards on my desk grouped behind pencil-labeled guide cards, one for each of the buildings in hand. One card is made out for each

original contract to be let on each building, as well as any changes, extra work, etc., which may come up during construction. One has thus under his finger for instant reference a list of the contractors selected to bid on each work, and a memorandum which will prevent embarrassment from a drawing not being made at the proper time or bids not being invited or any part of the work being forgotten.

CERTIFICATES. — I have a large collection of certificate blanks which are very similar, naturally, in matter but range in size from very diminutive slips to 8 x 10 inches. The form illustrated (Figs. 6 and 7) is an average and is a size, $3\frac{3}{4}$ x 8 inches, convenient for mailing as well as for filing in the owner's document file or contract folder. Stub records may be brief, simply certificate number, building number, date, amount and contractor's name. A letterpress copy of every certificate should be kept, and it is made clearer for reference if the blank is printed in copying ink; many architects, by the way, are having various forms printed in aniline for this purpose.

Cass Gilbert has printed at the bottom of his certificates the following:

This certificate, whether issued as final or otherwise, is an opinion only, and is in no sense a guarantee on the part of the Architect. It is not to be interpreted as an acceptance of any work or material which

<p>Pay roll May 6-11 1901</p> <p>W. J. Manning 27.15 J. D. Harris 30. James Hastings 18. Curtis True 6. \$81.15</p>		<p>May 6-11 01</p> <p>Bldg. Dig. Supt. Dis. Ofc.</p> <p>607 4.49 4.49 2.15 22.40 22.40 623 16.02 16.02 11.13 630 31.60 31.60 31.60 52.11 4.49 2.15 22.40 81.15</p>	
<p>May 6-11 01 W. J. Manning</p> <p>623 - Model 7 7 7 4 25.64 16.02</p> <p>1/4 scale plans</p> <p>D</p> <p>TOTAL 16.02</p>		<p>May 6-11 01 J. D. Harris</p> <p>630 - Church 7 7 7 7 4 39.74 30.00</p> <p>1/4 scale drawing</p> <p>D</p> <p>TOTAL 30.00</p>	
<p>May 6-11 01 W. J. Manning</p> <p>607 - James Hastings</p> <p>Trip superintendence</p> <p>May 9. Travelling exp</p> <p>disbursement</p> <p>2.15</p> <p>D</p> <p>TOTAL 2.15</p>		<p>May 6-11 01 James Hastings</p> <p>Office 7 7 7 7 7 4 39.46 18.00</p> <p>Salary</p> <p>O</p> <p>TOTAL 18.00</p>	
<p>May 6-11 01 W. J. Manning</p> <p>607 - James Hastings</p> <p>1/4 scale details</p> <p>7 64 4.49</p> <p>D</p> <p>607 7 7 4.49</p> <p>Superintendence</p> <p>S</p> <p>TOTAL 14.64 8.98</p>		<p>May 6-11 01 Curtis True</p> <p>630 - Church 4 62 10.25 1.60</p> <p>1/4 scale plan</p> <p>D</p> <p>Office 7 7 7 3 1/2 4 28.12 44.00</p> <p>Misc.</p> <p>O</p> <p>TOTAL 39.154 6.00</p>	

(ORIGINAL SIZE, 5 X 3 INCHES EACH.)

FIG. 9. TIME CARDS WITH SUMMARY OF ONE WEEK'S PAY ROLL. OVERTIME IS RECORDED IN SAME FORM, PRINTED ON RED CARDS.

CASH SLIP		VOUCHER NO. 385
DATE 3/21	190 2	COST \$.75
CHARGE TO OFFICE		
ITEM Typewriter ribbon		
PURPOSE		
WANTED BY S.		
PER Daw		
APPROVED Daw		

CASH SLIP		VOUCHER NO. 386
DATE 3/21	190 2	COST \$.25
CHARGE TO BUILDING NO. 607-Supt.		
ITEM Telegram to Mason		
PURPOSE		
WANTED BY M.		
PER H. Daw		
APPROVED Daw		

(ORIGINAL SIZE, 5 X 3 INCHES EACH.)

FIG. 10. VOUCHER CARDS.

is defective, or which is not in accordance with the contract, and in making payment under it the Owner reserves the right to hold the Contractor strictly responsible for defective work or material, or for any violation of the contract.

The receipt of the amount of \$....., in accordance with the above certificate, is hereby acknowledged, and the work and material furnished by the undersigned is hereby guaranteed to be the best of its kind and strictly in accordance with the contract.

Contractor.

Frank Miles Day & Bro. print on their certificates:

NOTICE AS TO INSURANCE.

On making this payment the Owner should assure himself that his interests are protected by insurance sufficient to cover his liability in the increased amount resulting from this payment.

They have also a perforated attached form which is torn off and mailed to an owner as soon as a certificate is issued, thus:

No..... Philadelphia,.....190

Mr.....

DEAR SIR:

We have this day issued to..... a certificate of payment on account of..... contract for work on your.....

We call your attention to the insurance clause of your contract and to the notice as to insurance upon the certificate.

Yours truly,

EXPENSE RECORD.—An architect is a professional man and does not do business strictly on a commercial basis. He is always striving toward an ideal and insists on making a drawing over and over as often as he pleases, even if it costs twice his fee. At the same time it is nothing more than simple good business to keep tab in a general way on expenses.

If it is found that one class of work cannot be done

satisfactorily on an office cost of less than 5 per cent, it might be considered time to raise the fee for that particular work to 7½ or 10 per cent.

The "Expense Record" card shown in Fig. 8 assumes that every expenditure in an architect's office comes under one of four divisions: 1. "Draughting,"—salaries and all expenses incident to preparation of drawings which can be charged to a particular building, even a telegram or a frame for a perspective; 2. "Superintendence,"—including salaries and car fares in connec-

Seaman, Alexander		116
ADDRESS	14 E. 10th St.	
REFERENCE	McKim, Mead, & White	
CLASS	Designer	
BEGAN	May 1. '99	
SALARY	\$23.00	
INCREASE	Sep. 1. '99 \$30.00	
RESIGNED	July 1. 1901	
REASON	to go abroad.	

REQUISITION SLIP		DRAUGHTSMAN NO. 91
DATE 3/19	190 2	
PLEASE ISSUE TO ME		
1 HB Rohinor		
1 ink eraser		
SIGNED B.S.R.		
LIBRARY BUREAU ADDRESS		

TELEPHONE CALL AT	O'CLOCK	DATE	BLDG. NO.
BY	TEL. NO.		
ASKED FOR			
MESSAGE			
REPLY			
FEB			

TELEPHONE CALL AT	O'CLOCK	DATE	BLDG. NO.
BY	TEL. NO.		
ASKED FOR			
MESSAGE			
REPLY			
FEB			

(ORIGINAL SIZE, 5 X 3 INCHES EACH.)

FIG. 11. MISCELLANEOUS FORMS.

COMMERCIAL TRUST CO. BLDG.
EXCHANGE PLACE & YORK ST. NEW YORK
OFFICE OF
GEO. S. POST,
Architect.

(EMD) 207-64

DRAWING RECEIVED 2456

Approval

from Melcher Bros

with letter - estimate of cost 19 Feb 1901

Date of Receipt	Description	Cash	On Order	Balances
March 1901	San Francisco Meeting Court House			Be Bo
March 1901	Van Ness			
Feb 1901	Complete			

Examined and due approved Jan Feb 26 - 01

for JR

Subscribed notified Jan 27 1901

Returned Jan 26

Melcher Bros & Co.

Noted of

particular instructions by correspondence

Wm Dunnington & Son

RHS

cent. If, then, the record card for one building shows the cost of the first two items to foot up \$1,000, add 60 per cent say, and \$1,600 plus disbursements represents a fairly accurate statement of actual cost for the architectural service on that building.

The time cards shown (Fig. 9) are given to the junior draughtsman, who distributes and collects the cards late every afternoon. Each draughtsman records his time, and notes under the hours charged to each building the work on which he is engaged. The bookkeeper adds the rate and figures the amount on each and makes up the summaries of the week's pay roll. The bunch of cards for each week, with a paper band about it, is dated and dropped into a card index drawer. This method requires the least amount of clerical labor, as nothing is transcribed save the summaries, and combined with the "Expense Record" cards makes it easy to tell at any time just what the office cost is on any particular building. If one happens to have a piece of work on a salary (or honorarium) and disbursement basis (exposition buildings for example), separate time cards are kept for that piece of work and made in duplicate, one card for each man, and receipted by each and sent as vouchers to the owner. These time cards, too, are convenient in that

By taking the "Office Expense" for a whole average year and finding what ratio it bears to "Draughting" plus "Superintendence" a close approximation can be determined of the portion of office expense chargeable to any given building. Some architects figure this at 50 per cent, others 60 per

OFFICE ACCOUNTS. — The accounts should be kept in a systematic way but as simply as possible to require the least possible amount of clerical labor. The stenographer should be free to give more time to specifications and correspondence than to bookkeeping. Some offices have a double-entry system of bookkeeping as formidable as that of a mercantile concern. The essential books are, however, a cash book (also a cash-drawer book), a ledger and a bank-check book. Every expenditure and every receipt should show on the stubs of the bank-check book and be compared once a week with the cash-book balance, and once a month comparison should be made with the pass book balanced by the bank. When a payment is made by check the stub shows for what and to what account it should be charged. For example, when the month's blue-print bill is paid notation is made on the check stub :

From the stub entry is then made in the cash book. The voucher cards shown (Fig. 10) are useful in a large business in enabling the head of the office to keep easily *au courant*. Whenever a payment is made from the cash drawer a card is placed on his desk, and at his convenience then or afterward he initials each to show that he was cognizant of the transaction. An important use for these voucher cards is in connection with a branch office. A card is made out for every expenditure and receipt, and once a week a bunch is sent along with the pay-roll cards to the main office together with a brief statement like this :

In the ledger, aside from the account opened with each client, there appears a "Personal Account" showing cash advanced for use in the business or amounts paid out for private use, "Profit Account," "Expense Office," "Expense Disbursement," "Expense Superintendence," "Expense Draughting," "Account Receivable — Commission," "Account Receivable — Disbursements."

The last two accounts named are credited whenever bills are rendered to clients, and the client's account is credited when the bill is paid. A trial balance (a very simple matter in an architect's small ledger) should be taken once a month or once a quarter at most.

Selected Miscellany.

THE following is the contents of a circular letter which has been sent out under date of September 9, 1902, by the Architectural League of America, and will have an interest no doubt for many who will not receive the letter.

The Committee on Circuit Exhibition begs to have the coöperation of your club in making the coming exhibition of the circuit a success. Fortunately, by the coöperation of the Architectural League of New York, it will be possible to have as one of the features of the exhibition a representative collection of photographs of foreign church buildings.

In the last few years the Architectural League of New York has been actively engaged on the subject of municipal art, and has been the leader of a number of conferences on this important question. Much of the informa-



DETAIL BY A. C. LYONS, ARCHITECT.
Perth Amboy Terra-Cotta Company, Makers.

tion in reference to the planning of cities which has resulted in the replanning of Washington and other important projects of a similar nature was discussed in a preliminary way at the rooms of the Architectural League of New York. At various times the question of parks, transit, bridges, tunnels, public buildings and the rearrangement of streets has been taken up.

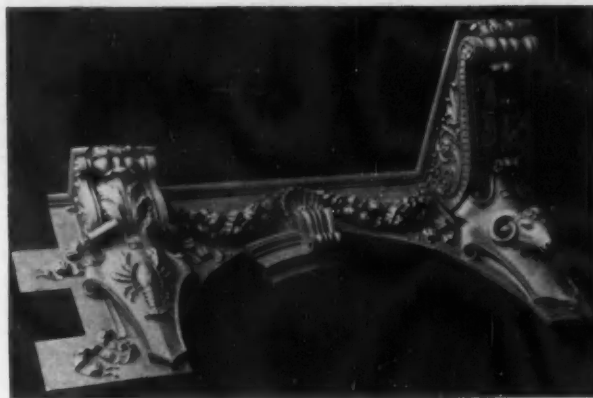


DETAIL BY W. ALBERT SWASEY, ARCHITECT.
St. Louis Terra-Cotta Company, Makers.

This year a special committee has been appointed to take up the question of semi-public buildings, and the subject of church architecture will be given particular attention.

The committee is pleased to state that in answer to numerous letters the replies received show that the question of better architecture and the methods of obtaining it is agitating Europe. Replies have been received from many prominent dignitaries and officials, notably His Eminence Cardinal Richards of Paris and His Grace the Archbishop of Bordeaux.

A communication has been instituted with societies having the betterment of church architecture in view. These societies have the benefit of the influence of the important personages affiliated with them. Thus in the movement we find the names of Comte Guy de Larouche-foucault, president of the Society for the Betterment of Ecclesiastical Buildings; Prince A. d'Arenberg, member of the Institute and a representative of the Artistic Society of Amateurs, — both societies of France; His Grace the Archbishop of Munich, of the Ecclesiastical Society



DETAIL BY CHARLES I. BERG, ARCHITECT.
Atlantic Terra-Cotta Company, Makers.

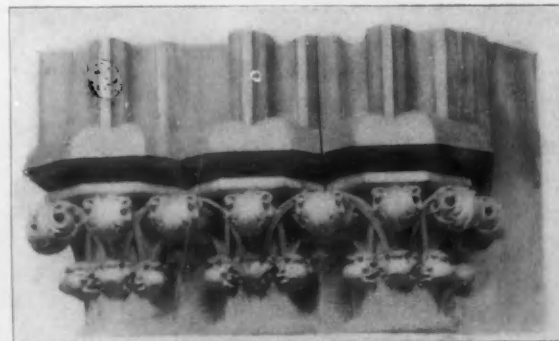
of Germany; and the Archbishop of Glasgow, of the Church Craft Society in England. And as well there are to be found the names of many prominent artists, as for example: Paul Dubois, director of the Ecole des Beaux Arts; Charles Lehmaire; Albert Maignan, secretary of the Society of French Artists; and G. Rubrich Robert, architect-in-chief of Historic Monuments.

In the many letters received from these and other individuals the importance of improved methods of architectural education is dwelt upon, and the committee of the Architectural League of America hopes by making this branch of architecture a feature of the coming circuit exhibition it will secure the interest and coöperation of each city in which this series of photographs is exhibited. Already photographs have been promised of the new Westminster Cathedral, Notre Dame de la Carde, the Great Basilica at Lyons, the Sacré Cœur of Paris and many others. And it hopes to secure, through the coöperation of each club, representative photographs of what is now being done in the United States.

The importance of this question cannot be overestimated, and the subject has been taken up most earnestly by the Architectural League of New York. On the committee having this work in charge is Mr. George L. Heins, New York State Architect.

The results of the efforts of this committee will be exhibited in the rooms of the Architectural League of New York at a conference of all those interested.

No better statement as to the importance of this question can be given than the one made by Mgr. Paulinier, Archbishop of Besançon, in his circular letter in which he says that the neglect of the study of architecture has exposed the precious heirlooms of the past to a double peril: they are either lost by a lack of appreciation and



DETAIL BY GEORGE H. STREETON, ARCHITECT.
Excelsior Terra-Cotta Company, Makers.

allowed to be dissipated, or they are destroyed by so-called restoration. To show the inertia existing in Europe at the present time he states that from eight hundred custodians communicated with but two really intelligent replies were received.

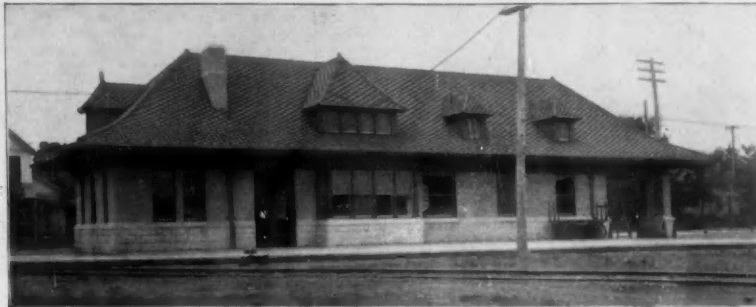
It is the hope of your committee that you will attempt to make this exhibition of church buildings representative of the work in America.

This can be accomplished by collecting from the work of those in your club and immediate vicinity such photographs as will be representative of what is being done in that section of the country. It is suggested by the committee that the best method of doing this would be for your club to appoint one competent representative with power, and that he secure the necessary photographs and see that they are forwarded to the committee in New York on or before October 20.

It is of course understood that while it is the desire of the committee to have as complete an exhibition of church architecture as possible, it is not the intention of the committee to restrict the circuit exhibition to this specialty. Photographs, therefore, or any work selected by the representative of each club will be included in the regular exhibition.

The size of photographs should not be over two feet in the greatest dimension.

Photographs should be forwarded to William Laurel Harris, care of the Architectural League of New York, 215 West Fifty-seventh Street, New York.



RAILWAY STATION, RICHMOND, IND.
W. S. Kaufman, Architect.
Built of Hydraulic-Press Brick, Roofed with Celadon Roofing Tile.

ing and Estimating Woodwork Generally.

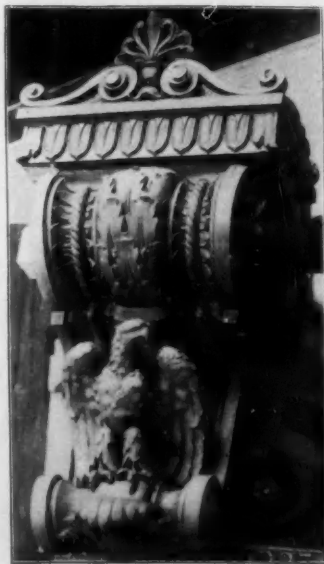
A NEW TERRA-VITRÆ TILE.

THE Hartford Faience Company have put upon the market a terra-vitræ tile which is new because of its thickness, or rather its thinness, it being only half an inch thick, the usual thickness for such tile being three quarters of an inch. This not only makes the price of the tile less, but considerable is saved in freight

charges. They are prepared to execute promptly any orders for special sizes, but carry a stock of size 6 x 3 inches in ten colors — seven in the gloss and three in the dull finish. Caps and bases to match these tile, for wainscot work, are also carried in stock.



DETAIL BY FRANKLIN BAYLIES, ARCHITECT.
Standard Terra-Cotta Works, Makers.



DETAIL BY McKIM, MEAD & WHITE, ARCHITECTS.
New York Architectural Terra-Cotta Company, Makers.

BOOK REVIEW.

MODERN CARPENTRY AND JOINERY.—A Practical Manual. By Fred T. Hodgson. Frederick J. Drake & Co., Chicago.

The book is copiously illustrated with diagrams and figures showing the solution of many intricate problems in geometry, roofing, carpentry, joinery and stair work. The

There is a nice distinction about a burnt-clay tile which carries its own recommendation, and their increased use by architects generally is a matter which is gratifying to all concerned.

IN GENERAL.

The house in Brookline, Mass., illustrated in the half-tone plate form of our August number was by William Whitney Lewis, architect, Boston.



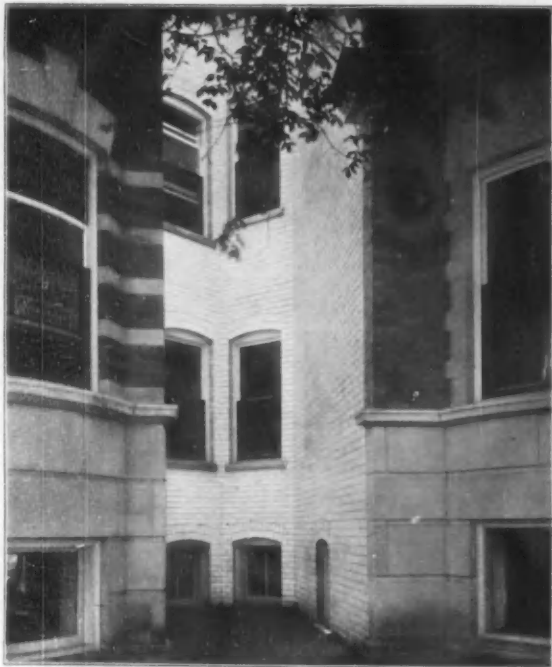
DETAIL BY JAMES H. WINDRIM, ARCHITECT.
Conkling-Armstrong Terra-Cotta Company, Makers.

illustrations and descriptive matter are clear, simple, definite and easily understood.

The work is divided into four parts, namely:

Carpenter's Geometry; Timber Framing and Carpentry; Joinery and Joiners' Work; and lastly, Rules and Tables for Measuring

Celadon Roofing Tile—Charles Bacon, Boston agent—will be used on the following new work: Lodge at Bunker Hill, Boston, A. H. Vinal, architect; Gate House, Waterbury, Conn., D. W. Cole, city engineer; three



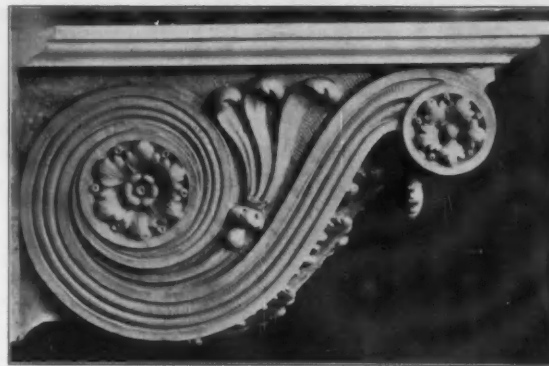
COURT OF AN APARTMENT, CHICAGO, SHOWING USE OF WHITE ENGLISH-SIZE ENAMEL BRICK OF SECOND QUALITY INSTEAD OF COMMON BRICK WHITEWASHED.

buildings for Mr. Larz Anderson, Brookline, Mass., Fox & Gale, architects; Library, Grand Rapids, Mich., Shepley, Rutan & Coolidge, architects; group of hospital buildings, Washington, D. C., Shepley, Rutan & Coolidge, architects. The last named will require nearly twenty-five hundred squares of tile.

Charles Bacon, Boston agent, reports the following new contracts for Sayre & Fisher Company brick: Carney Building, Boston, Hartwell, Richardson & Driver, archi-



DETAIL BY LOUIS CURTISS, ARCHITECT.
Northwestern Terra-Cotta Company, Makers.



DETAIL BY AMOS W. BARNES, ARCHITECT.
New Jersey Terra-Cotta Company, Makers.

itects; Old Colony Trust Building, Boston, Shepley, Rutan & Coolidge, architects; Foster Building, Boston, Winslow & Bigelow, architects; Mercantile Building, Cambridge, Mass., J. A. Schweinfurth, architect.

ASPHALT.

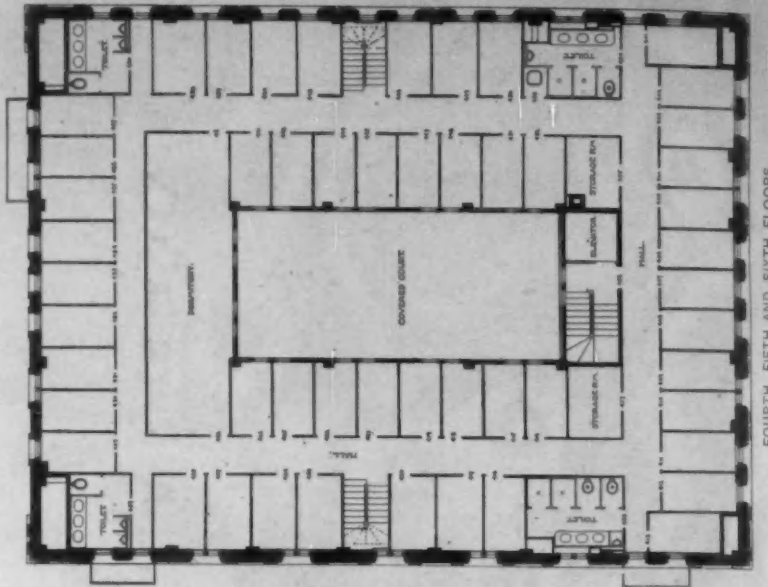
THE term asphalt is used improperly to designate a variety of substances ranging from a coal tar compound so soft that on a warm day it is easily punctured by an umbrella stick, to a material so hard that it appears to have all the wearing qualities of granite. Properly speaking, asphalt is a product obtained by crushing a



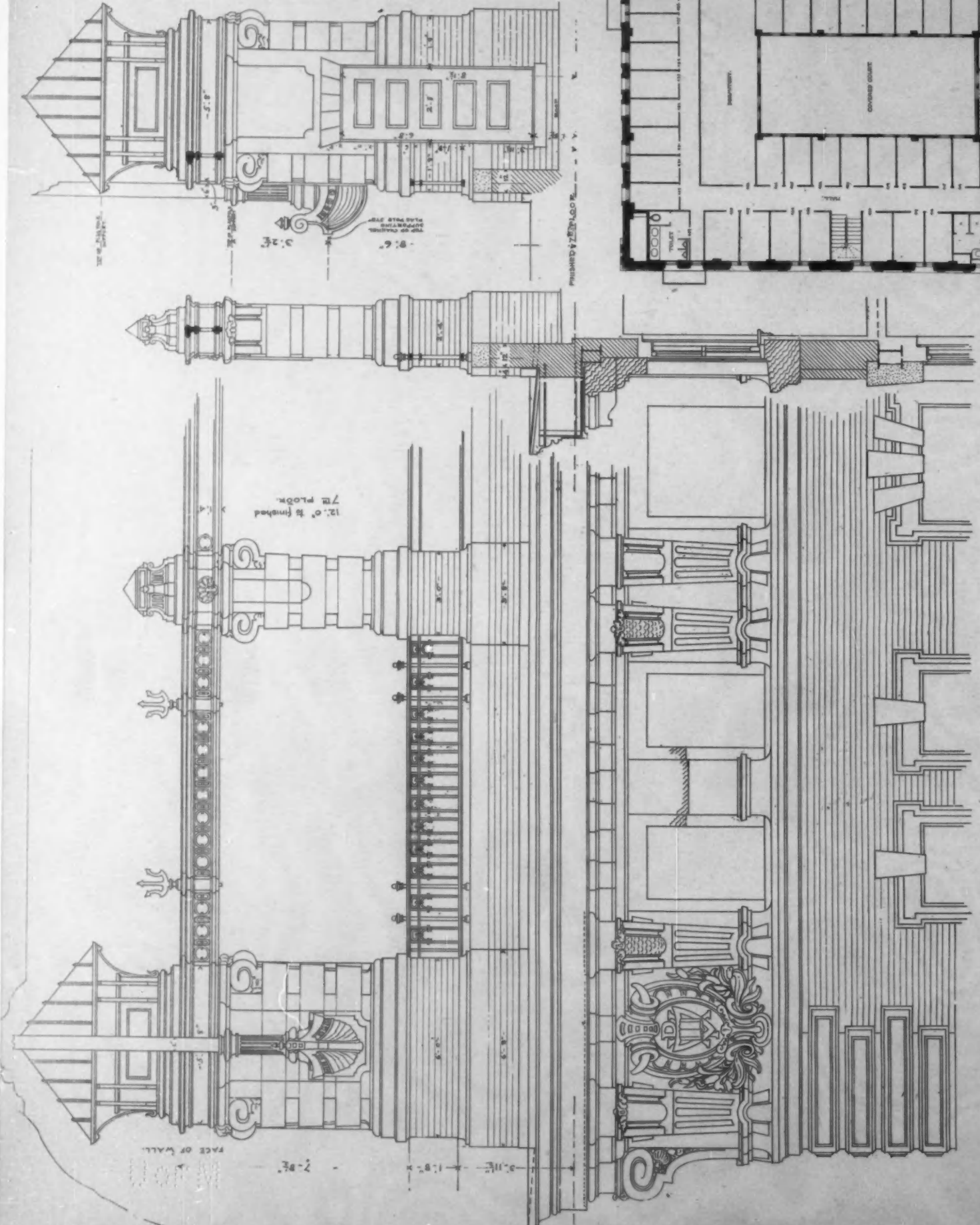
SUBWAY, SOUTH TERMINAL STATION, BOSTON.
Shepley, Rutan & Coolidge, Architects.
Lined with American Enamel Brick and Tile Company's Brick.

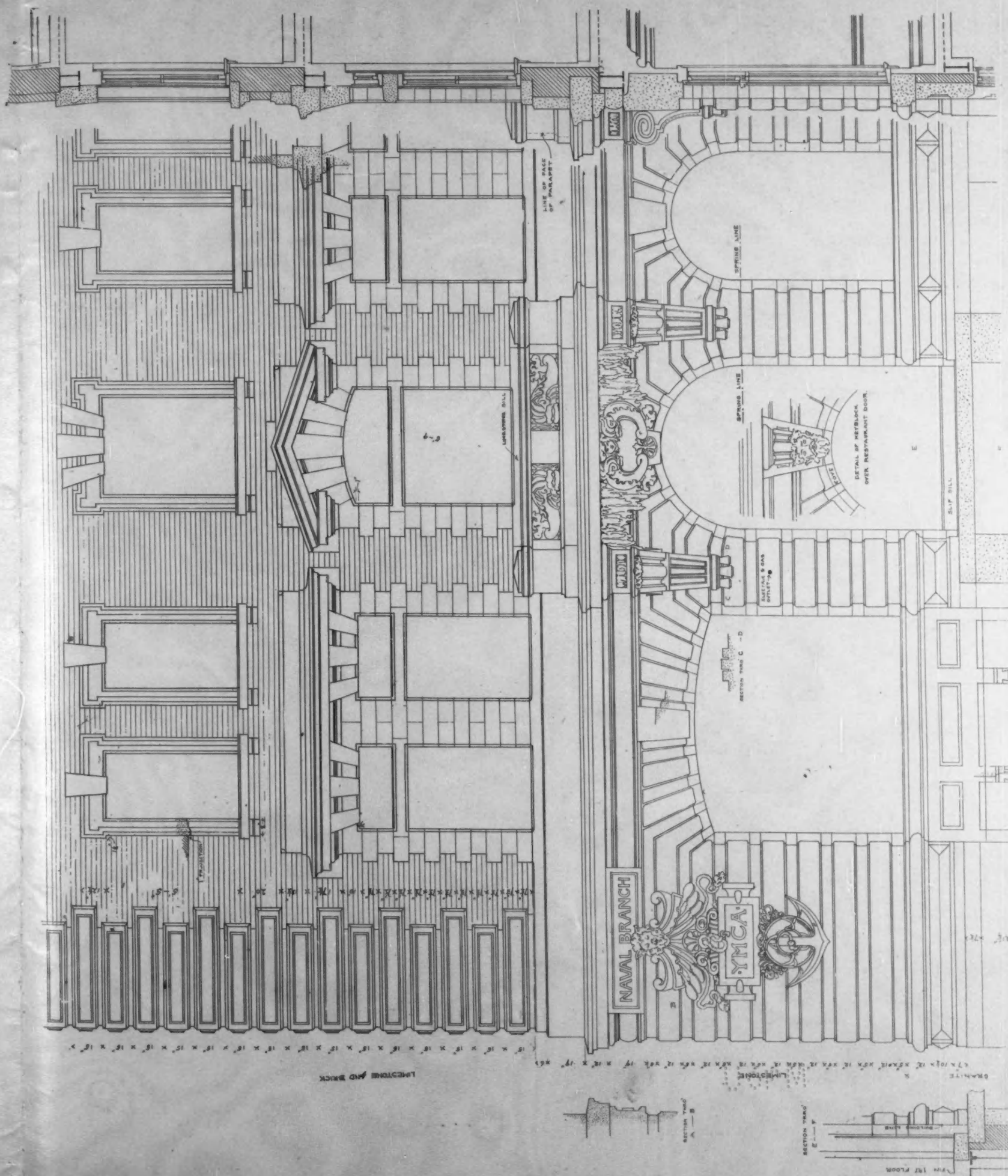
species of limestone which is very strongly impregnated with mineral oil and mixing it with a natural pitch which is collected in the remarkable asphalt lake of the island of Trinidad opposite the mouth of the Orinoco. An oil is added for a flux, the whole is melted together and then mixed with a certain proportion of sand. Next to thoroughly hard-burned paving brick, asphalt is probably one of the best materials for covering sidewalks and roadways which we have. A comparison, however, of even the best of asphalt and the paving brick shows that the former is not only far more expensive but is more difficult to lay properly, and is not so durable, while paving brick for public highways is practically the only material which can be satisfactorily patched after being cut into.

FOURTH, FIFTH AND SIXTH FLOORS.



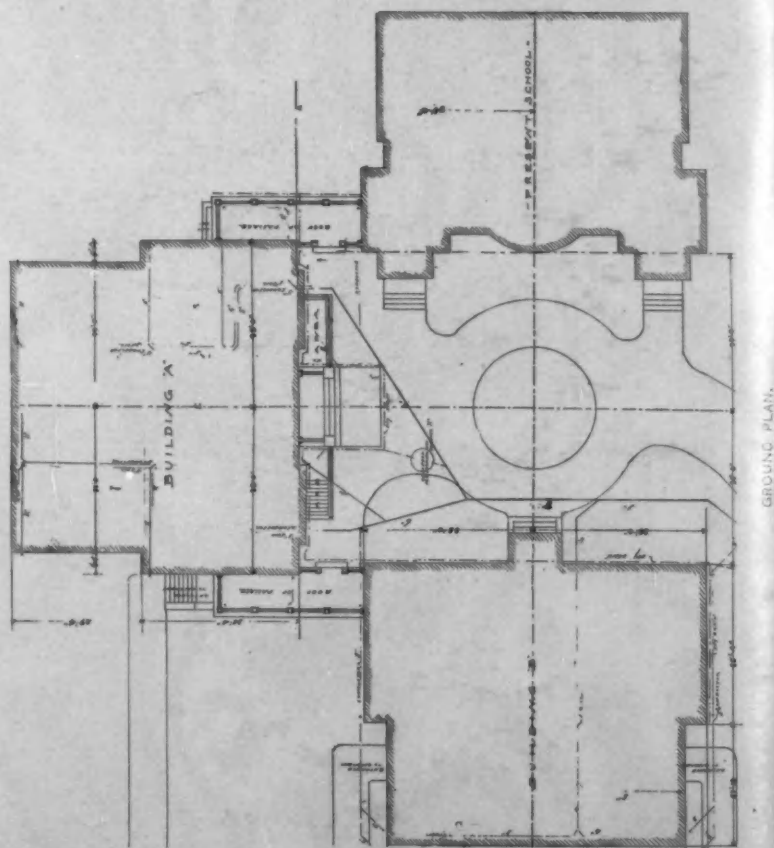
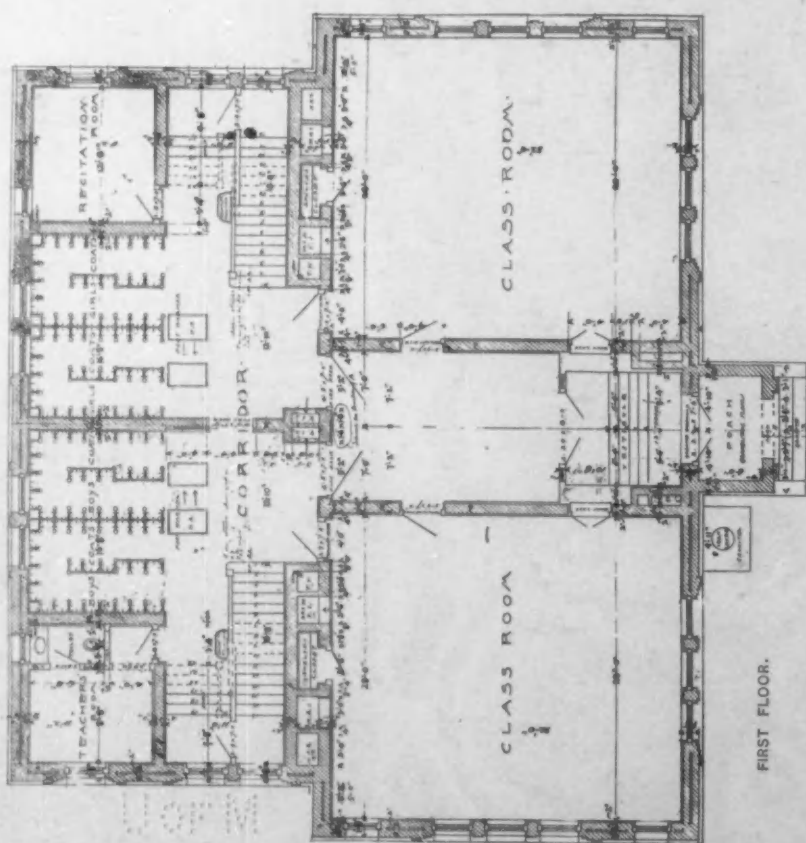
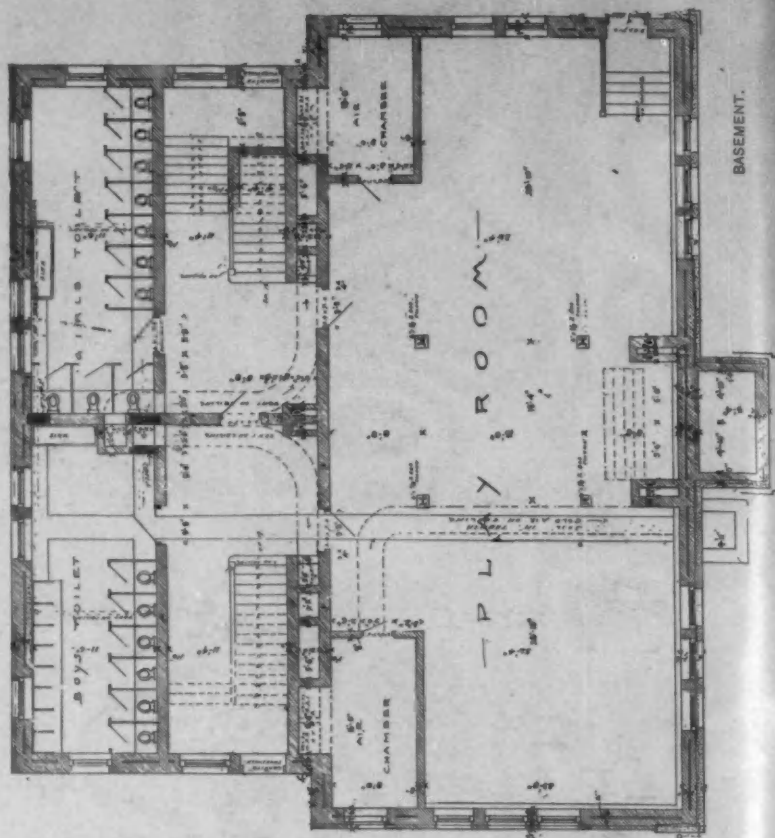
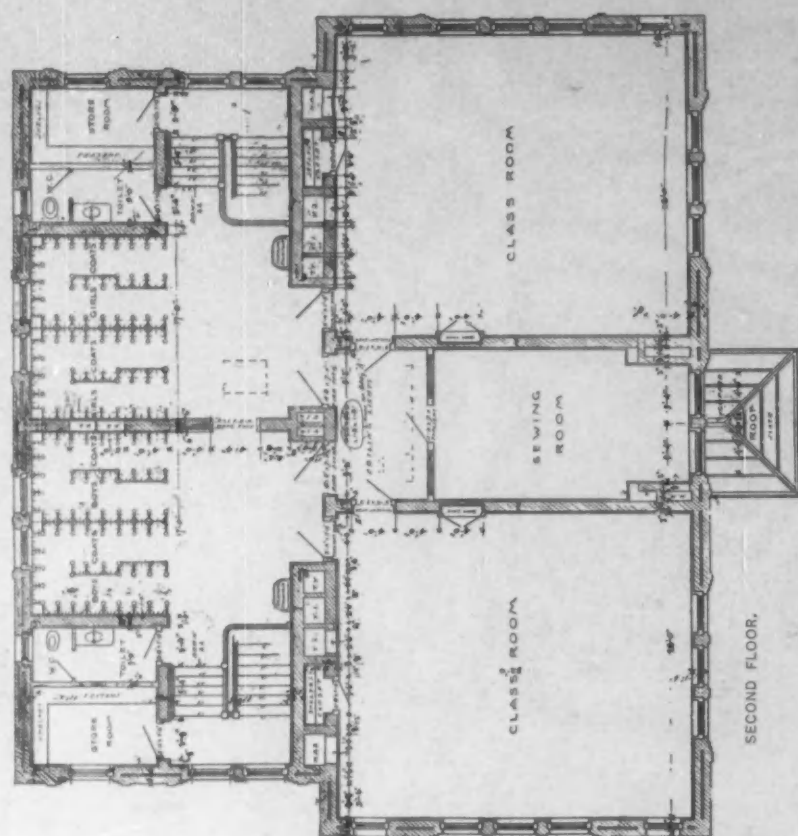
UPPER EXTERIOR, DETAILS.





LOWER EXTERIOR DETAILS.

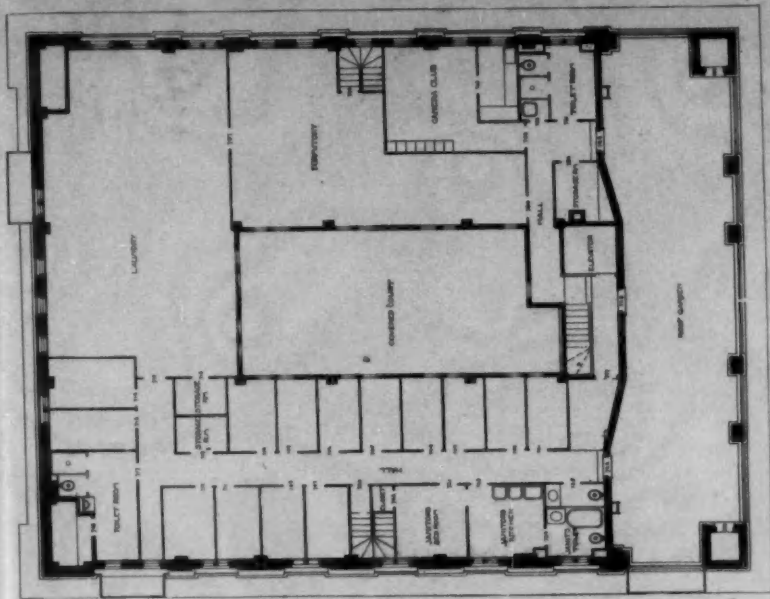
NAVAL BRANCH, Y. M. C. A. BUILDING, BROOKLYN, N. Y.



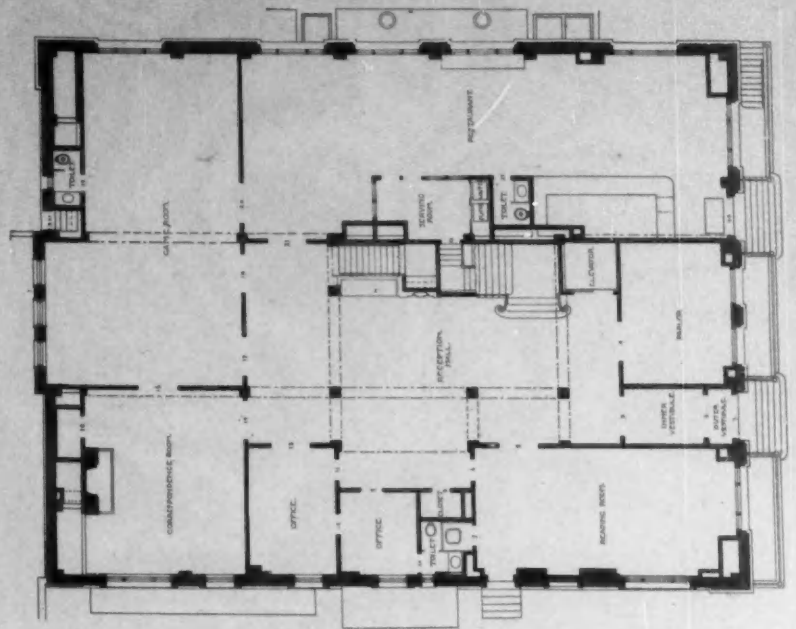
FLOOR PLANS, BUILDING B.
RUNKLE SCHOOL, BROOKLINE, MASS.
PEABODY & STEARNS, ARCHITECTS.

BASEMENT.

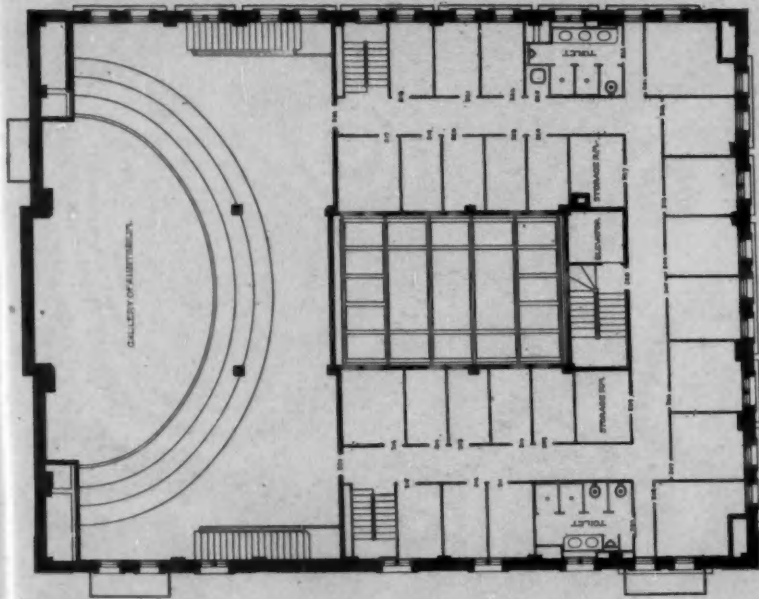
GROUND PLAN.



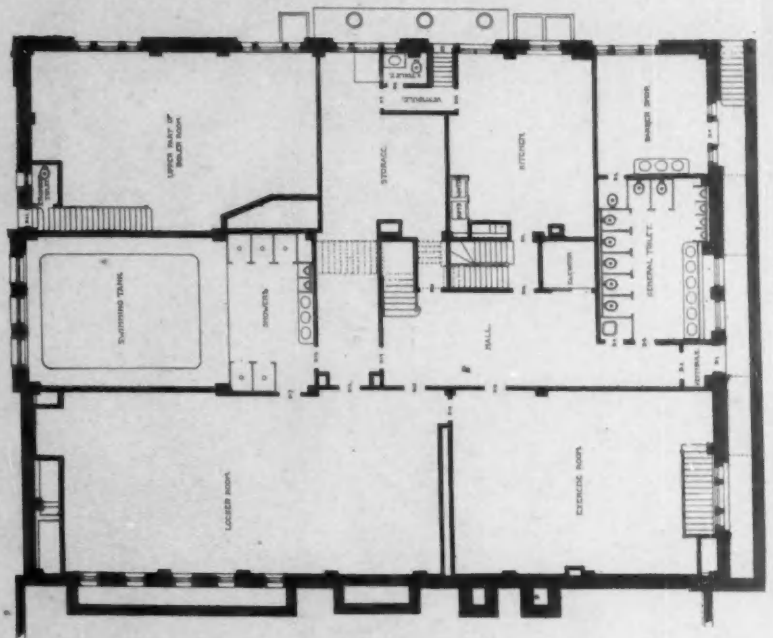
SEVENTH FLOOR.



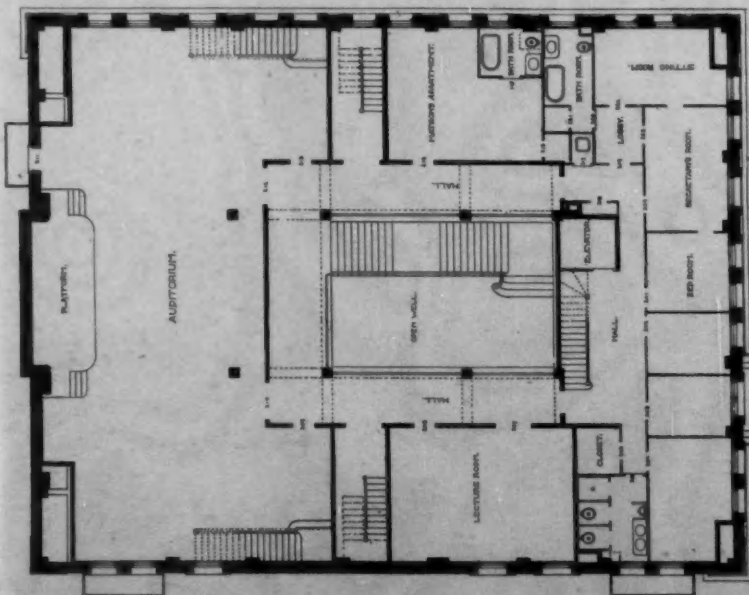
FIRST FLOOR.



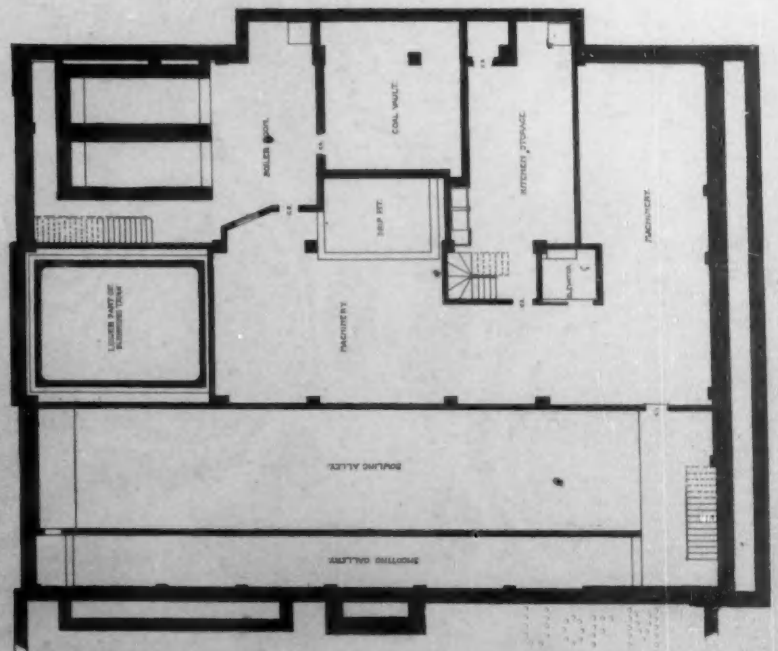
THIRD FLOOR.



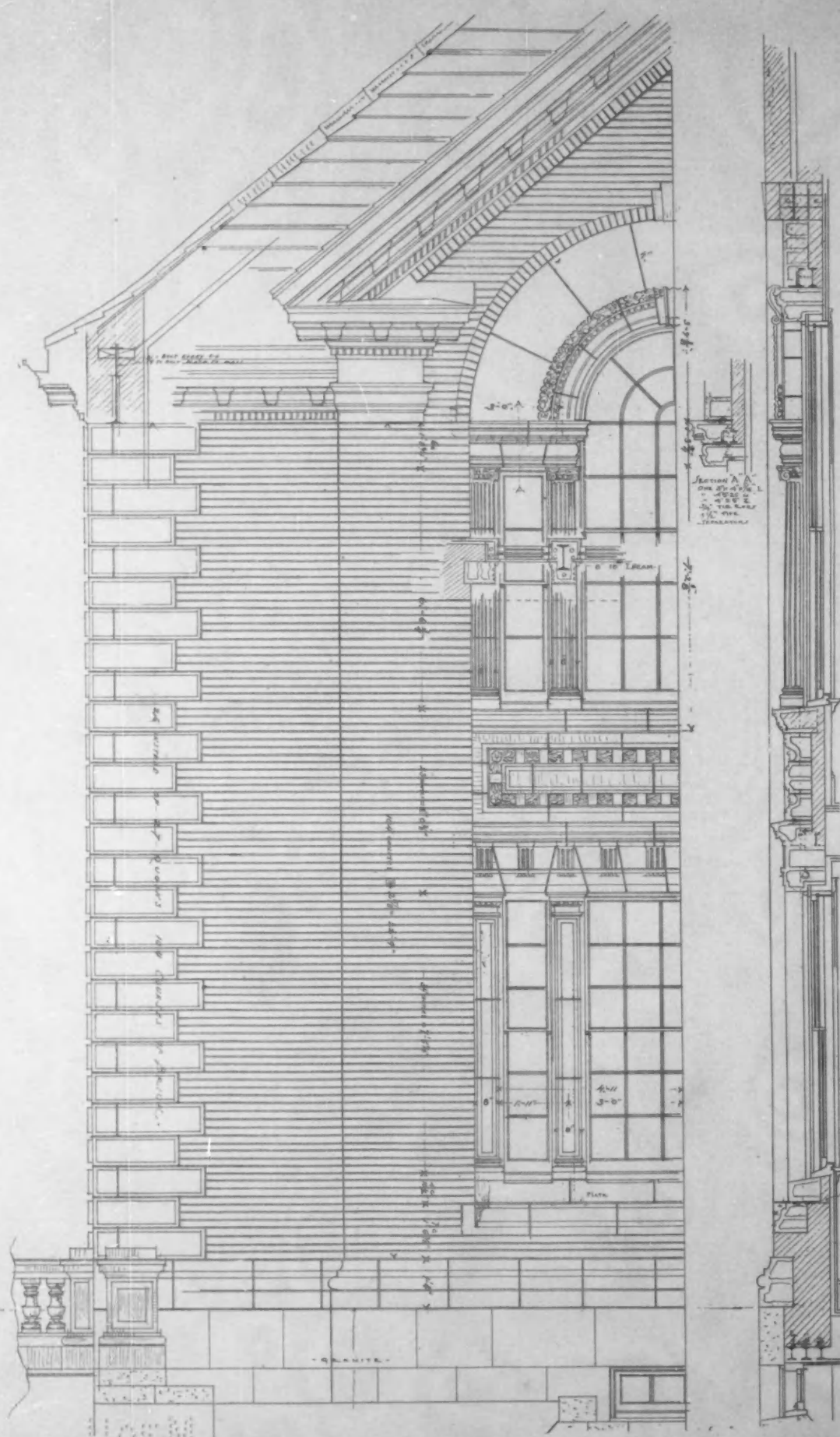
BASEMENT FLOOR.



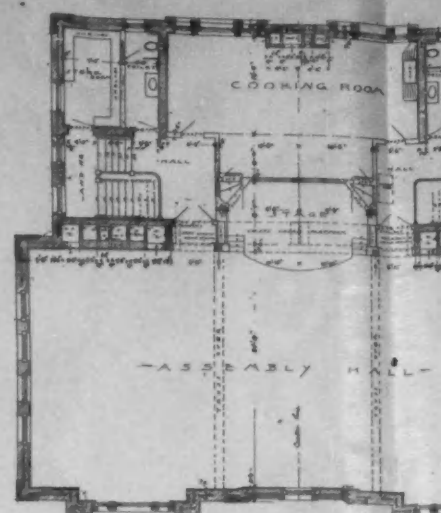
SECOND FLOOR.



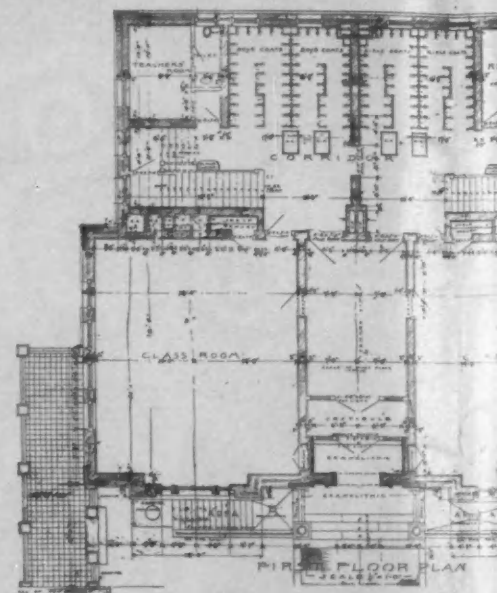
CELLAR FLOOR.



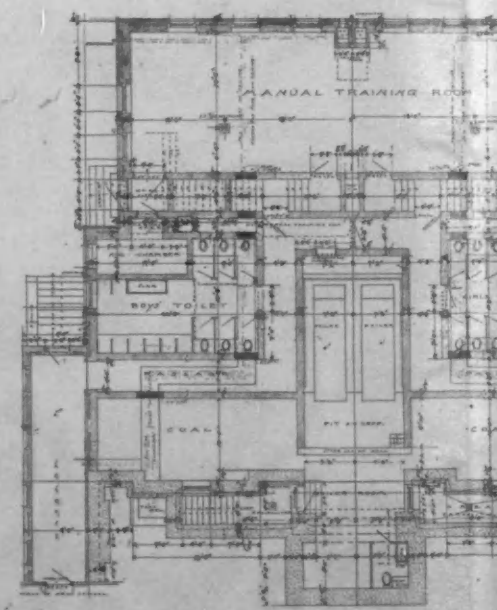
DETAIL, FRONT ELEVATION, BUILDING A.



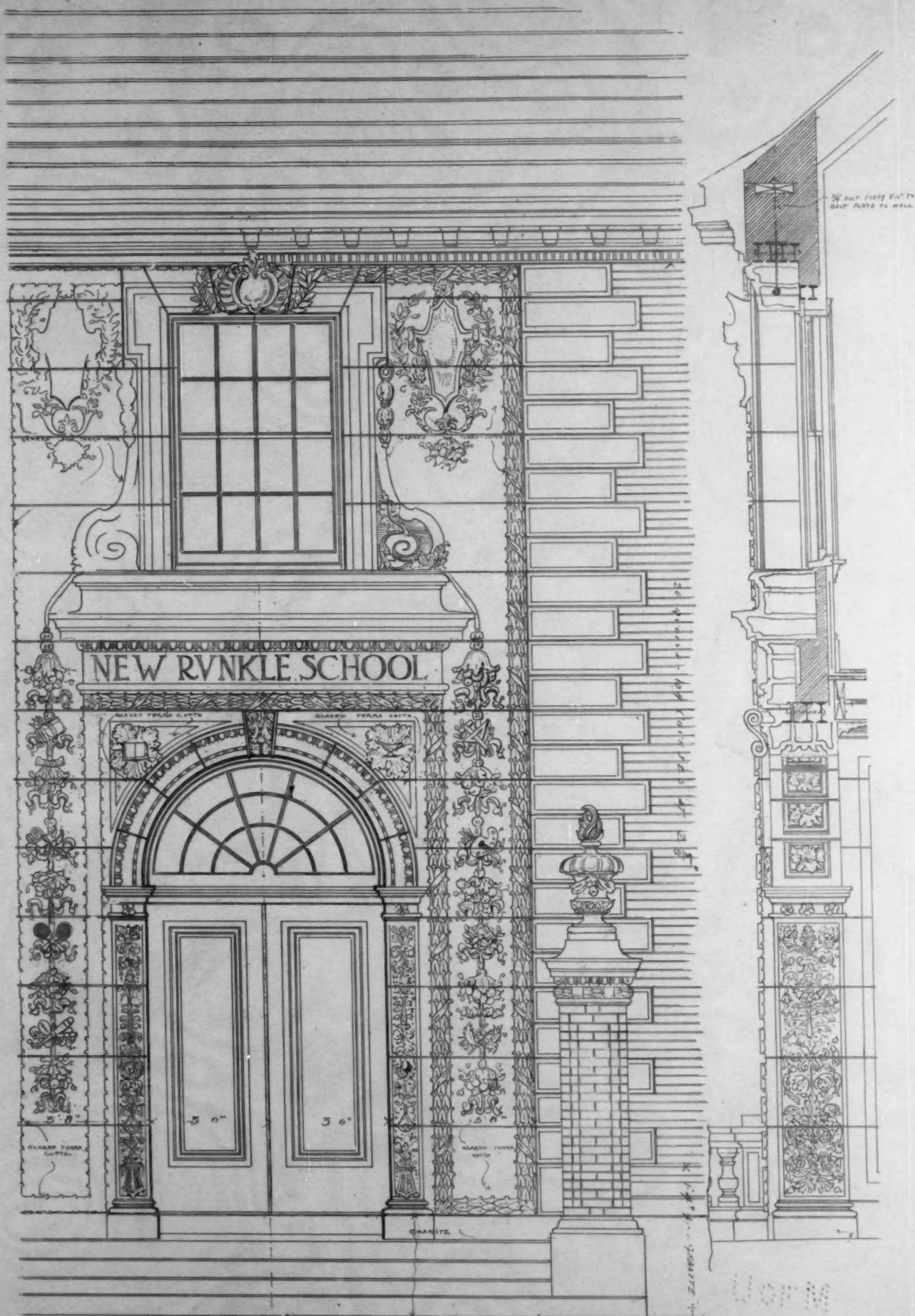
SECOND FLOOR, BUILDING A.



FIRST FLOOR, BUILDING A.

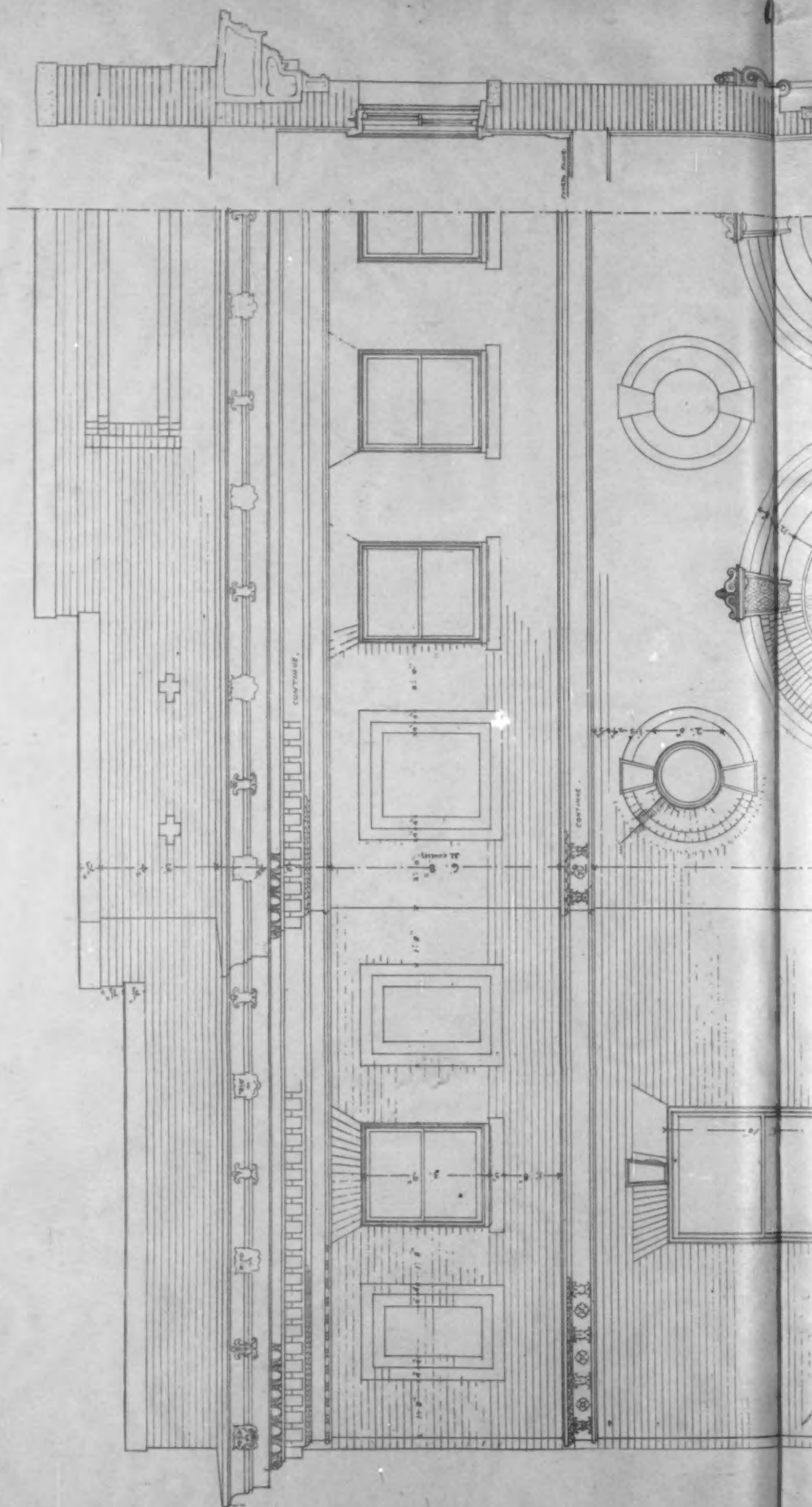
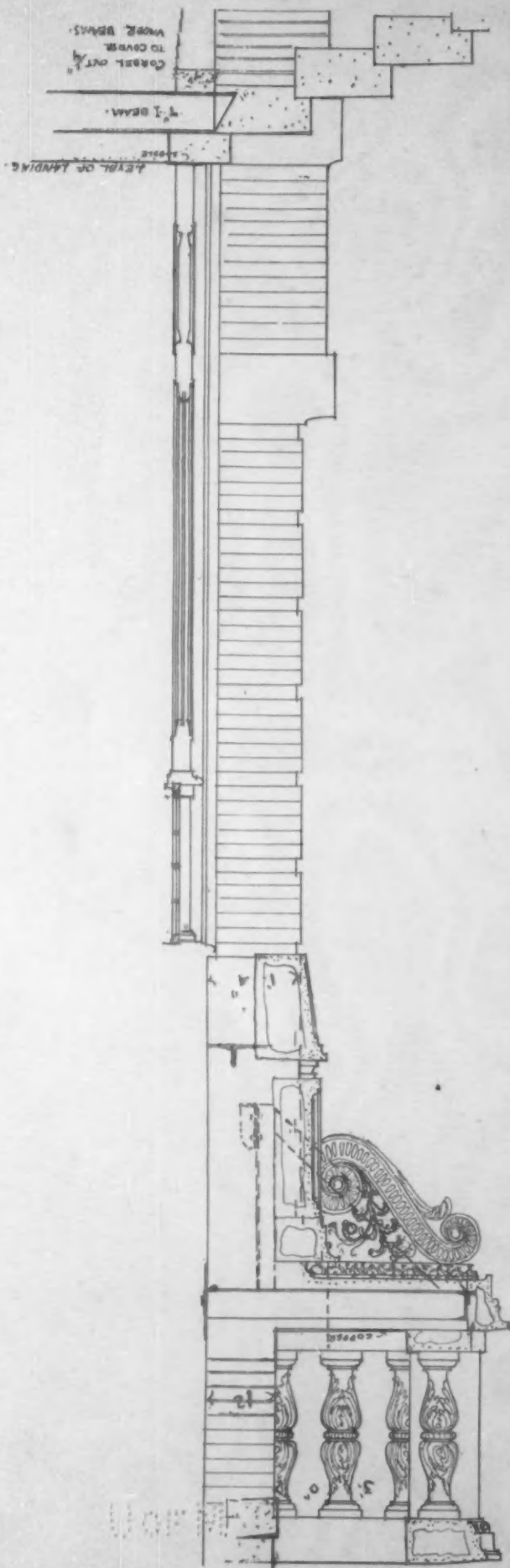


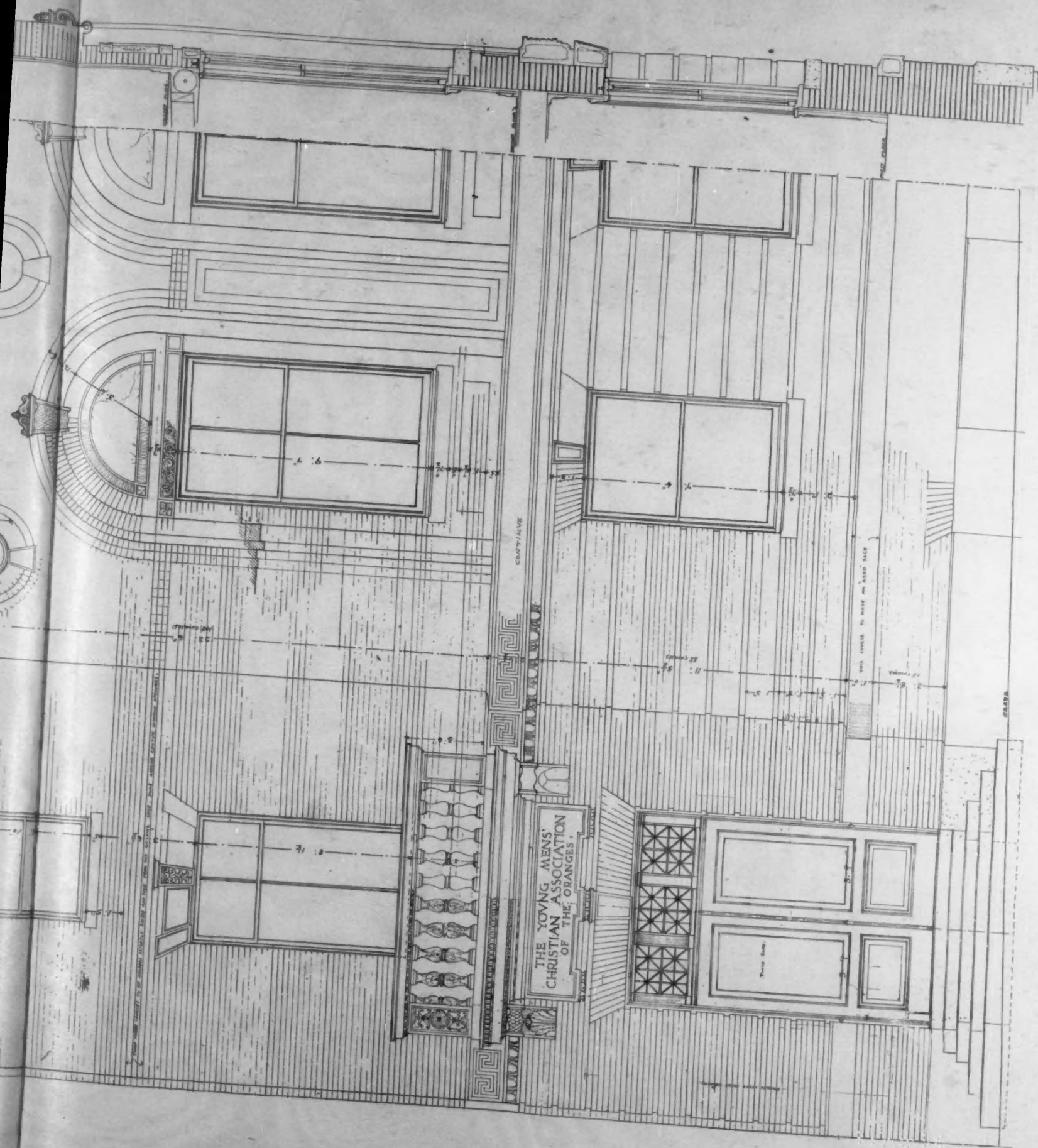
BASEMENT, BUILDING A.



DETAIL, MAIN ENTRANCE, BUILDING A.

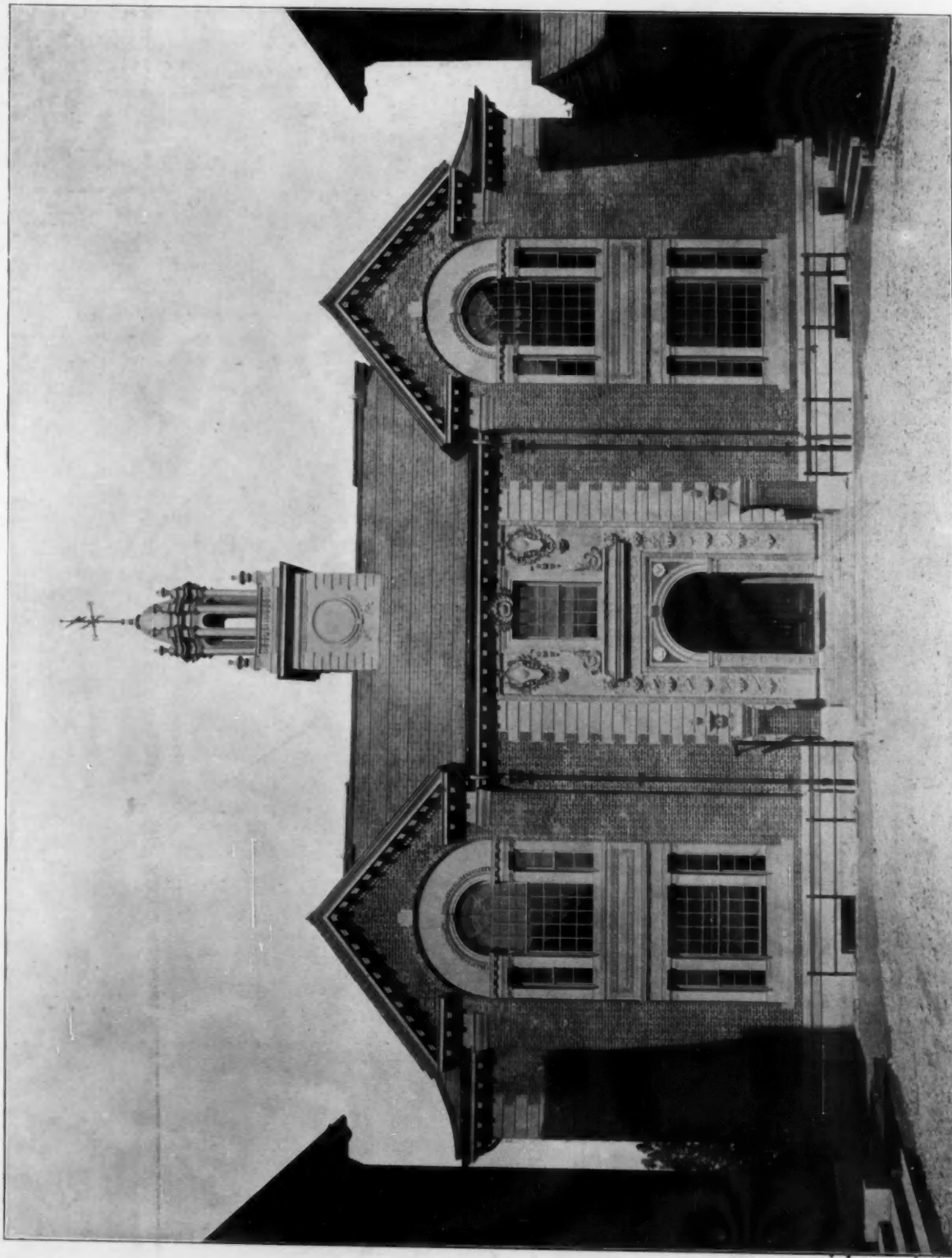
SCHOOL, 'BROOKLINE, MASS.
 DODD & STEARNS, ARCHITECTS.





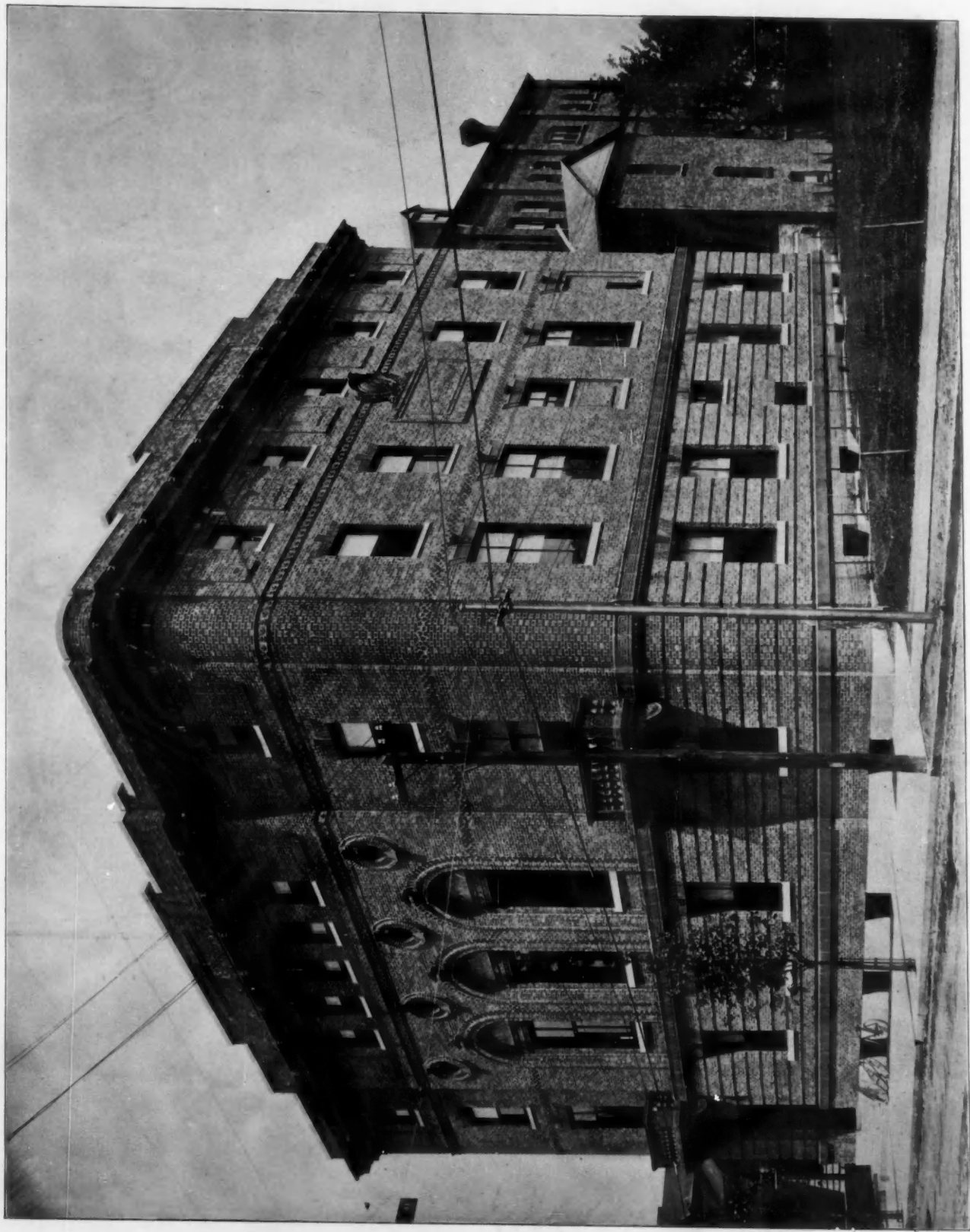
DETAIL, MAIN FACADE, Y. M. C. A., ORANGE, N. J.
MCKIM, MEAD & WHITE, ARCHTDS.

1000



RUNKLE SCHOOL (BUILDING A), BROOKLINE, MASS.
(PRIVATE SCHOOL.)
PEABODY & STEARNS, ARCHITECTS.

M 70 U



Y. M. C. A. BUILDING, ORANGE, N. J.
MCKIM, MEAD & WHITE, ARCHITECTS.

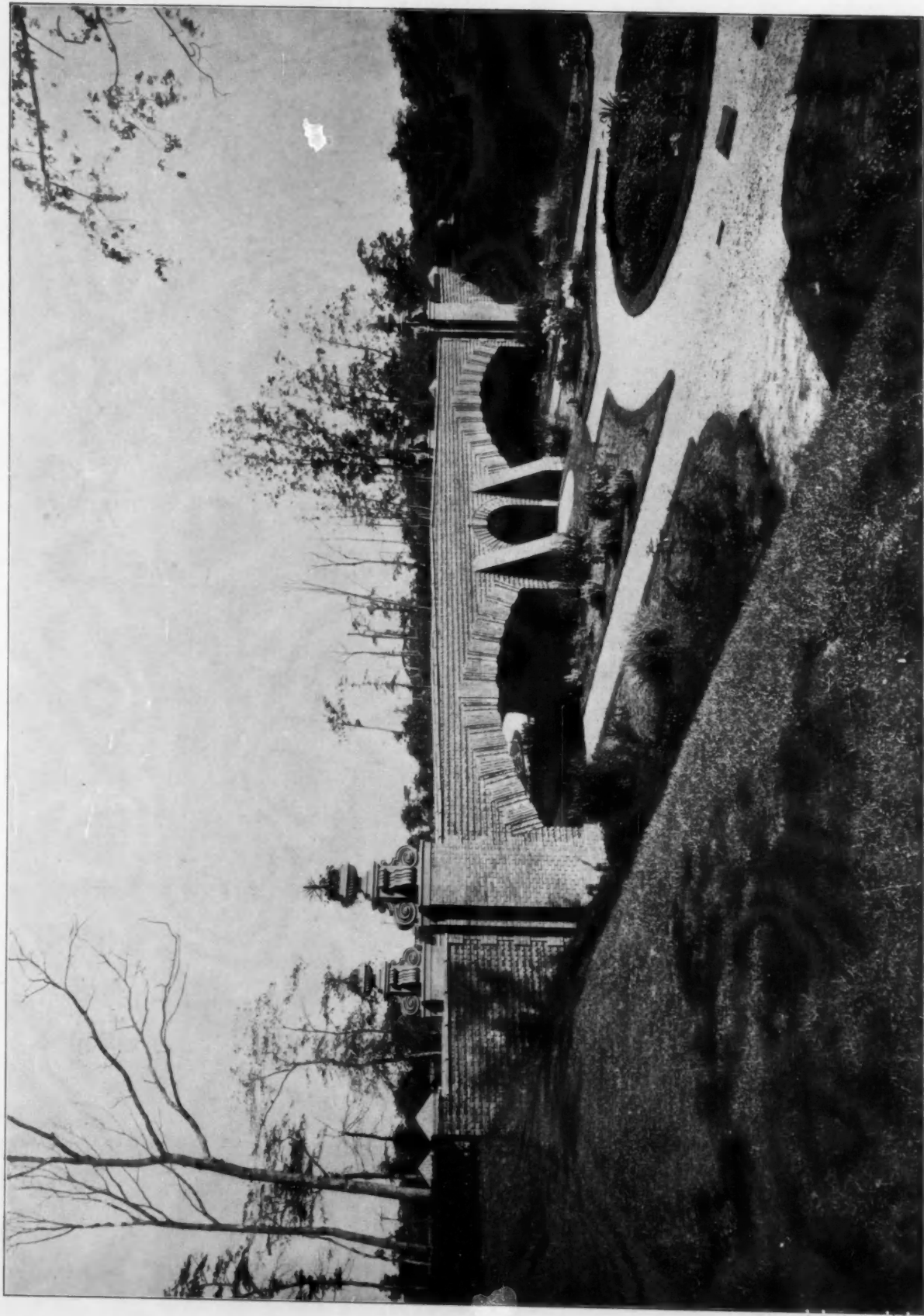
1904



RUNKLE SCHOOL, BROOKLINE, MASS.
(PRIVATE SCHOOL.)
PEABODY & STEARNS, ARCHITECTS.

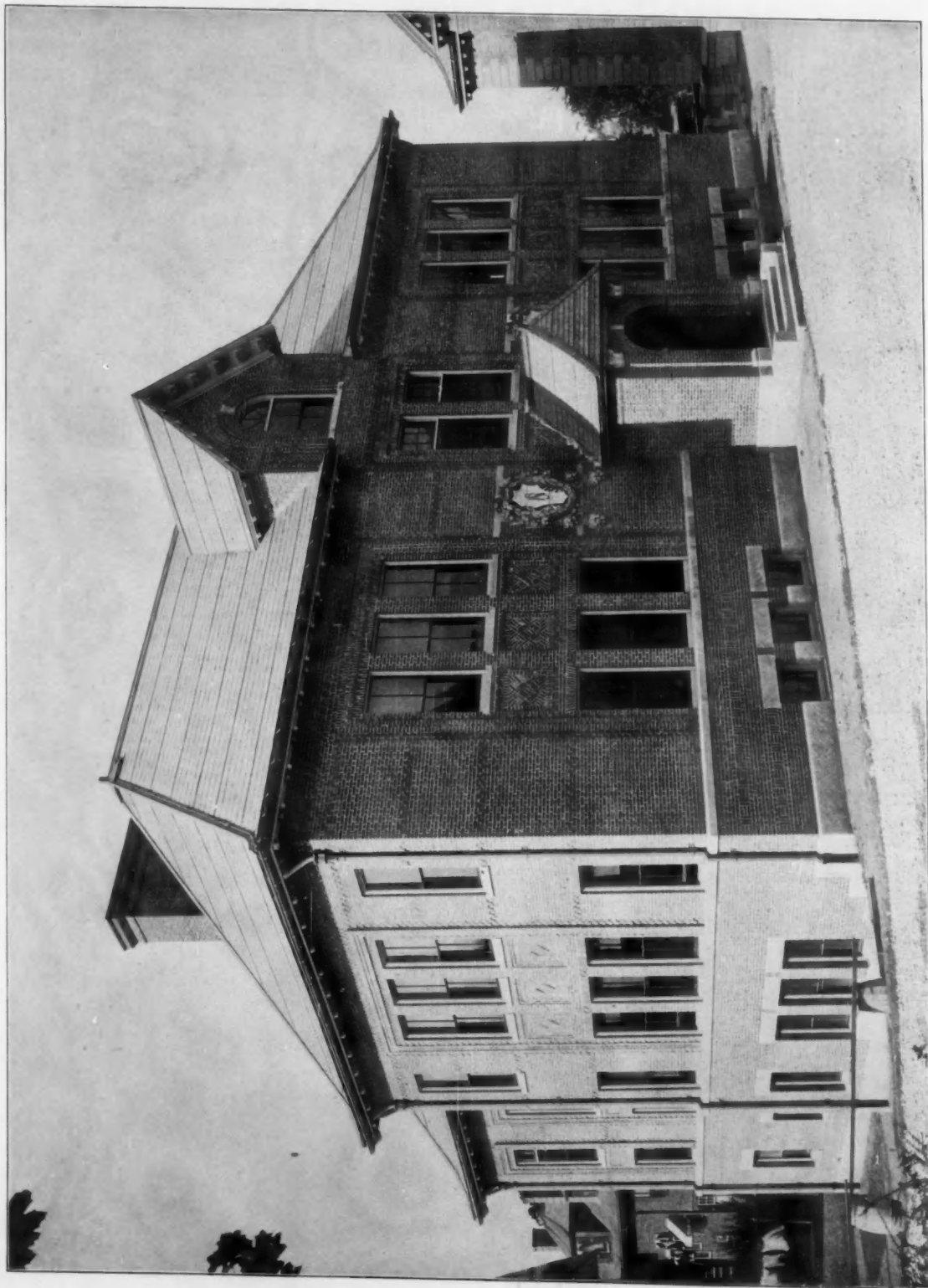
THE BRICKBUILDER,
SEPTEMBER,
1902.

1904



BRICK BRIDGE, O'DAY ESTATE, DEAL BEACH, N. J.
G. K. THOMPSON, ARCHITECT.

1000



RUNKLE SCHOOL (BUILDING B), BROOKLINE, MASS.
(PRIVATE SCHOOL)
PEABODY & STEARNS, ARCHITECTS.

THE BRICKBUILDER,
SEPTEMBER,
1902.

UOLM



NAVAL BRANCH, Y. M. C. A. BUILDING, BROOKLYN, N. Y.
PARISH & SCHROEDER, ARCHITECTS.